

TOWARDS LEISURE GUIDANCE

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### ABSTRACT

The purpose of this study was to identify a typology of leisure activities, based on the reasons why they were engaged in by participants. The sample for the study was a group of 250 people selected at random from the electoral rolls of Christchurch city and surrounding districts.

A questionnaire, listing 32 leisure activities and 21 possible reasons for engaging in them, was used to gather data on why people participated in the activities that they enjoyed. The analysis was designed to identify the predominant pattern of reasons associated with each leisure activity. A computer programme was utilised to identify the pattern that had been chosen most frequently. Leisure activities with statistically significant predominant patterns that had two or more reasons in common were grouped together. This resulted in five distinctive sets of leisure activities grouped on the basis of being engaged in for very similar sets of reasons. High correlations were found between these groups and groups resulting from a factor analysis of the same data.

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'As soon as man [sic] apprehends himself as free and wishes to use that freedom... then his activity is play.'

Sartre. "Being and Nothingness"

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## CHAPTER 1

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### 1.1 INTRODUCTION

Rapid technological and social developments have put us in a period where many people have increasing amounts of free time. This unprecedented situation requires new attitudes and measures to deal with some of the problems it presents. Leisure guidance, or the lack of it is one area of concern. For example, whilst there may be guidance available for making vocational choices in the form of training systems and counselling services, there is very little support or aid to make avocational choices.

This study investigates recreational activities engaged in during leisure time. Two main questions are asked;

- 1) What are the reasons for engaging in specific leisure activities?
- 2) Which activities are carried out for the same sets of reasons?

Some of the factors which have contributed to the current position are: 1) A reduction in the number of work hours has

been reported. American University (1980) states the average weekly work time has decreased from sixty hours in 1870 to thirty-nine hours in 1970. A twenty percent reduction in the time that the average employee spends working per year since the turn of the century has given a net annual gain of eight hundred non-work hours (Hendricks and Burdge 1976).

~~These decreases have resulted in shorter working weeks, more holidays and longer weekends and vacations.~~

2) Increasing levels of unemployment and redundancies, later entry into the work force, and lowered age limits for forced retirement (Minkler 1981), have all had an impact on the numbers of people experiencing increased leisure time.

3) Automation and other technological advances which are replacing human work, are also increasing leisure time (Caldwell 1974; Dumazedier 1967; Elliot 1964; Fourastie 1965; Kahn and Weiner 1967; Porter, Lawler and Hackman 1975)

4) An increase in the general level of affluence and advances in medical science have led to earlier retirements (Birren 1964; Riley, Foner, Moore, Hess, Roth 1968) and longer life spans with the effect of a greater proportion of the life span being spent in non-work time.

This overall trend towards increasing leisure time has been identified and noted by a number of authors, many of whom also foresee problems arising from a lack of preparation to cope with it (Burch 1971, Brail and Chapin 1973; Clawson 1966; Hartlage 1969; Martin 1969; Slickman and Brown 1974; Toffler

1970; Wolf 1970).

An unprecedented level of free time could be a difficult time for some. Increases in leisure time have been reported as leading to a degree of dislocation and deprivation (Morse and Weiss 1955) and been shown to have a major impact on morale and self-respect (Jahoda 1979). Possible harmful effects on youths have been noted by the Christchurch Employment Advisory Committee (1979); Eizenburg and Lazarsfield (1938); Haines and Macky (1982); and Stafford Jackson and Banks (1980). Other studies have also noted the importance of leisure time as a determinant of the mental health, work adjustment and life satisfaction of the individual (Brooks and Elliot 1971, de Grazia 1962, Kaplan 1960, Lofquist and Dawis 1969, Martin 1967, Medel 1971, Oberle 1971, Robinson 1969).

There is a need for increased awareness of this development. Research and planning are urgently required to make available practical help such as widespread leisure guidance and counselling facilities.

Some of the aims and advantages of preparing for leisure are described by Rapoport and Rapoport (1975 p335) :

"Leisure provision ... should enrich the quality of life. A simple philosophy of leisure will not do this, what is needed is a philosophy of life. People's capacities for developing personal interests are critical in this. The interest capacity is essential, not only to enrich life, but to safeguard against hazards of socialisation, occupational redundancy and alienation in an "age of discontinuity". Interests serve as threads of continuity around which lives may be organised. They relate individuals to their own pasts and futures as well as to others in their social and

natural environments."

Rapoport and Rapoport use the word 'interest' in the sense of motivations. Other words which have been used in the same sense have included 'needs' and 'satisfactions'. For this study the 'Reasons Why' a person chooses to engage in an activity has been utilized. It is hoped that this will enable a clearer description of a person's underlying motivations, and also be more simple for subjects to respond to.

Leisure research has often suffered from the lack of a commonly accepted definition of leisure and associated concepts. To clarify the stance of this thesis and to adopt the clearest definition available, the concept of leisure as a segment of time is adopted. Specifically, "leisure time" is "all time not required to maintain biological functions, economic worth and sociocultural obligations"(Shivers 1981). The individual can freely choose to participate in, or withdraw from, any leisure time activity.

"Recreation is characterized by its consummatory nature. It has the power to seize and hold the individuals attention to such an extent that the very meaning of subjective time and environment disappears from view [...]. What individuals lose during moments of frustrating experience, their equilibrium and sense of proportion may be regained through the unifying power of recreation. Recreation is any non-debilitating consummatory experience" (Shivers 1981 pp207-208).

This definition stems from a homeostatic viewpoint. Recreation is regarded as being both the product and process

of the human organism's attempts to attain equilibrium.

Every science must begin with a sound descriptive base (Hinde 1979), and the importance of this is no less in the leisure field (Bishop 1970; Meyerson 1969; Ritchie 1975). Only with this basis can we progress towards a fundamental goal of scientific knowledge of "developing systems of classification or typologies" (Reynolds 1976).

The importance of research on the identification and stable classification of the motivational forces underlying leisure behaviour patterns has been noted by a number of writers in the field (Howard 1976; London, Crandall and Fitzgibbons 1977, Pierce 1980; Tinsley, Barrett and Kass 1977; Tinsley and Kass 1978, 1979).

The purpose of this thesis is to illustrate the "match" between various leisure activities on the basis of the reasons why they are done. The identification of the reasons that are associated with specific leisure time activities, and of the groups of activities which are performed for the same reasons is important in determining which activities may be substitutable. A parsimonious description of this information could be used by people to narrow their search for recreational activities.

## CHAPTER 2

### 2.1 LITERATURE REVIEW

This chapter reviews the literature relevant to leisure classification. The research is covered in four general sections, reflecting differing emphases apparent in the field. A table follows this review summarizing the authors, the focus of their research and the analysis used. The research methodologies are then reviewed followed by a discussion of the problems identified in the literature. Finally, the aims of this study are listed.

The research on leisure has varied considerably in its focus. Some advances made in the area stem from a range of approaches to the problem of classifying leisure behaviour.

These approaches include :-

- 1) A priori classification of leisure activities
- 2) emphasis on classifying leisure activities alone,
- 3) emphasis on the individual and his or her subjective experiences,
- 4) emphasis on the needs or satisfiers that may be motivating leisure behaviour.

While these variables of leisure activities, individual differences and needs have received considerable attention, this has often been in isolation. Few studies combine them in a holistic approach.

### 1) A priori classification.

De Grazia in 1962 laid the foundations for many of the subsequent investigations of leisure by his groupings of leisure activities. He identified five bi-polar types to classify the activities: active-passive, participant-spectator, solitary-social, indoor-outdoor, and in the home-outside the home. Kaplan (1960) suggested five different leisure types which appear to match some of de Grazia's, namely social, games and sport, art, movement and immobility. The New Zealand Classification of Leisure Activities, (based on Howorth et al 1977), classifies an exhaustive list of leisure activities into thirteen different areas:

- 1) Domestic science and property maintenance related activities
- 2) Hobbies
- 3) Education and learning related activities
- 4) Religious and Philosophical activities
- 5) Activities related to the arts
- 6) Personal and community service activities
- 7) Professional, social, political and other specific interest group oriented activities
- 8) Team sporting activities
- 9) Small group and individual sporting activities
- 10) Active outdoor pursuits and sporting activities
- 11) Conveyance related sport and casual activities
- 12) Antisocial and illegal activities
- 13) Casual activities n.e.c.

### 2) Activities.

More empirically based analyses of leisure activities have been undertaken using factor analysis. These have

managed to replicate some factors across studies but variation in results has given rise to a somewhat confused picture of the underlying leisure factors.

Proctor (1962) factor analysed respondents participation in a number of outdoor recreation activities, and identified factors of;

~~- passive pursuits~~

~~- watersports~~

- active pursuits

- backwoods activities.

Bishop (1970) factor analysed 25 different leisure activities, by frequency of participation, and elicited three dimensions;

- active diversionary

- potency

- status.

These appeared to be stable over replication on four samples from different areas. Witt (1971), also using participation rates, found four dimensions;

- sports

- outdoor/nature

- adolescent/social

- aesthetic/sophisticated.

Two further important factor analytical studies of leisure activities were carried out by McKechnie (1974) and Howard (1976). McKechnie used both past participation rates and anticipated future participation rates. He found six dimensions;

- mechanics



- crafts
- intelligence
- slow living,
- sports
- glamour sports.

Howard, also using a participation rating, factor analysed twenty-four leisure activities and identified four categories:

- outdoor/nature
- sports
- aesthetic/sophisticated
- leisure detachment.

These mirror Witt's (1971) results, with the exception of leisure detachment.

Attempts to avoid some of the problems inherent in factor analysis, such as summarizing major variations and excluding minor ones, have led to the use of non-metric multi-dimensional scaling, and efforts to formulate leisure typologies. The multi-dimensional scaling approach was employed by Becker (1976), Holbrook (1980) and Ritchie (1975). Becker (1976) rated similarities among eleven activities and found three, unlabelled, dimensions. Ritchie (1975) identified four underlying dimensions by the perceived similarities of leisure activities:

- active-passive
- individual-group
- simple to perform-difficult to perform
- involving-time filling

A more recent study utilising this method was carried out by

Holbrook (1980), who identified two key dimensions:

- solitary-social
- indoor-outdoor.

Some work has also been done to objectively identify the unique attributes of either individual leisure activities or groups of leisure activities by using a task attributes approach. These have employed the conventional factors in that research tradition of e.g. feedback, variety, autonomy, influence, pressure, skill utilization and interaction. These were correlated with personality characteristics to identify some of the relationships between personality and leisure attributes. (Turner and Lawrence 1965, Hackman and Oldham 1975, Kabanoff 1981).

### 3) Leisure and Individual Differences

A section of the research has focused on a consideration of leisure activities from the viewpoint of the individual.

Simply asking respondents why they participated in various leisure activities led to a number of frequently mentioned "meanings". Donald and Havighurst (1959), and Havighurst (1961) identified eight of these meanings ;

- just for the pleasure of it
- a welcome change from work
- brings into contact with friends
- provides a new experience
- gives a chance to achieve something
- gives a feeling of being creative
- benefits society

- makes the time pass.

Goodman (1969) found five similar meanings of :

- change
- pleasure;
- relaxation
- accomplishment
- self-expression.

Other studies have aggregated individuals into the cells of a leisure typology within which their leisure participation patterns were similar (Romsa 1973; Ditton, Goodale and Johnson 1975; and Jih-Min Yu 1980). For example, Jih-Min Yu (1980) identified 17 mutually exclusive core cells and investigated their relationship with socioeconomic variables.

This approach is given some backing by recommendations made by Ritchie (1975), and secondly by Bishop and Witt (1970) and Endler and Hurst (1966). These latter researchers found a pronounced lack of variance being explained by the main effects of socioeconomic and demographic variables, with more variance being accounted for by interactions among variables. This suggests that researchers should take into account the interaction among activities, i.e. the respondents' pattern of leisure choices.

Tatham and Dornoff (1971) clustered individuals, and investigated the activities engaged in by each group. The dependent variables used in this case were socioeconomic characteristics. They concluded that different recreation patterns may be linked to combinations of socioeconomic

characteristics. However, other researchers have found demographic and socioeconomic variables to have been of little use in differentiating effectively among groups within an activity (Burch 1969; Burdge and Field 1971; Cicchetti 1973; and Romsa and Girling 1976).

Breit (1969) performed Q-type factor analysis to identify three "types" of people:

- action-oriented (predominantly male, relatively high education)
- social intellectual (predominantly female, relatively lower education)
- social entertainment (male and female, median education).

A number of studies have used personality instruments to categorize individuals. One of the approaches used has been to employ Hollands (1966, 1973) theory of vocational behaviour. This theory relates personality characteristics to behaviour in the educational, vocational and social domains.

This approach should be useful in leisure research for two reasons. First, as a method of examining and classifying avocational activities. Secondly as a cross life-sphere instrument, that is, relationships between, say, work and leisure can be explored using one instrument in a way which is meaningful to both spheres of behaviour.

Later research has attempted to discover why individual and group differences arise across leisure activities. For example, Christensen (1976) linked satisfactions to activities clustered on the basis of participation rates. However

Baumgartner and Heberlein (1979), in accordance with the Rapoport's' recommendations, called for "a greater level of specificity when linking satisfactions with specific recreation activities"

Bryon (1979) looked at the variability in satisfactions within individual activities. He argued that this variability may be the product of differing levels of commitment to that activity. This was supported by Jacobs (1980). However other factors that may also be operating here are that:

Different types of social groups define the meaning of objects so that all group members interpret these objects in a similar fashion (Burch 1964; Denzin 1969; Garfinkel 1963; Lee 1972). There may be variability in social group types participating in the same activity (Buchanan Christensen and Burdge 1981). Thirdly, environmental attributes may have an effect (Haas 1979). Finally, there may be an effect from secondary activities being carried out at or near the same time (Buchanan 1983; McCool 1978).

#### 4) Needs.

A number of studies utilizing the need hierarchies of Maslow (1954) and Alderfer (1972) have carried out research in this direction by attempting to link various needs to leisure activities (Driver and Knopf 1977; Hawes 1978; Howard 1976; Moss and Lamphear 1970; O'Connor 1970). Tinsley and Kass (1979) describe this approach as identifying "what need dimensions make participation in this activity psychologically different from participation in some other leisure activity?".

In a 1977 study, five leisure activities were found to differ on forty-two out of forty-five need satisfier dimensions (Tinsley Barrett and Kass 1977). A replication and extension of this research found thirty-three out of forty-five need dimensions significantly related to the leisure activity in which the respondent participated. They went on to identify ~~relationships between intercorrelated clusters of needs and specific leisure activities (Tinsley and Kass 1979).~~ Schneyer and Roggenbuck (1978) also linked specific satisfactions with specific activities. Allen (1982) attempted to identify a typology of leisure activities based on interest data, and to determine the degree of relationship between 20 of Murray's personality needs and the identified leisure typology. He found nine leisure activity factors that gave rise to four independent correlations when crossed with personality needs.

London, Crandall and Fitzgibbons (1977) neatly take into account the effects of these three variables; leisure activities, the people involved, and needs satisfied. They state that an important basis for substituting activities should be the needs they satisfy. That is, looking at the similarity of activities on the basis of the dimensions which more probably determine choice, such as the needs they fulfil, or amount of pleasure they provide, rather than on the basis of participation rates. Using Three Mode Analysis, (which extracts factors in each of the modes and then derives interrelationships across modes by means of a 'core' matrix), they examined the relationships among leisure activities, the needs they satisfy and the individuals who participate in

them. Three factors, Feedback, Liking, and Positive Interpersonal Involvement, reflecting latent need satisfier dimensions, were identified. These were related to leisure activity factors of Sports, Cultural-Passive, and Productive-Intellectual, in three distinct ways, reflecting three "individual factors".

Table 1

Summary of Literature Review: The Authors, Focus of their Research and the Type of Analysis Used.

RESEARCHER(s)	FOCUS OF RESEARCH	ANALYSIS USED
	Leisure Indiv. Needs	Factor MDS or Other
	Acts.      Diffs.	Anal.    Typology
De Grazia 1962,		
Kaplan 1960.	LA	Other
Proctor 1962, Bishop		
1970, Witt 1971,		
McKechnie 1974,		
Howard 1976.	LA	FA
Becker 1976, Ritchie		
1975, Holbrook 1980.	LA	MDS

Donald + Havighurst				
1959, Havighurst	1961			
Goodman 1969.		Needs		Other
Romsa 1973, Ditton,				
Goodale + Johnson				
1975, Jih-Min 1980.		Indiv.		Typol.
Tatham + Dornoff	1971			
Breit 1969.		Indiv.	FA	
Maslow 1954, Alderfer				
1972, Tinsley + Kass				
1979, Schneyer and				
Roggenbuck 1978,				
Bryan 1979, Allen	1982			
Kabanoff 1981.	LA	Needs		Corr.
London, Crandall and				
Fitzgibbons 1977.	LA	Indiv. Needs		3 Model

Note. MDS = Multi-dimensional Scaling.

The majority of studies in leisure research have used 'paper and pencil' instruments. A primary aim has been to gather data, and to do this most researchers have utilized a questionnaire. Samples of students have been prevalent, commonly comprised of volunteers or students obtaining course



credit. A common recommendation made in conclusion to these studies has been for replication on expanded or different populations. However other studies have used stratified random samples. These have been based on females (Ritchie 1975), city areas (Kabanoff 1981), counties (Bishop 1970; McKechnie 1974) and states (Duncan 1978; Jih-Min Yu 1980).

## 2.2 Problems Identified in the Literature

Several problems have hindered progress in the field of leisure research. Marano's (1975) criticism of a particular section of leisure research applies to many of the studies in the whole field, especially the earlier ones. He cites limited sample sizes, unreliable and imprecise measurement instruments, inappropriate statistical procedures, (for example, univariate analysis), and a failure to representatively sample the whole domain of leisure activities.

Most attempts to group activities, and thus find the underlying dimensions of leisure, have used factor analysis. There is the general problem with factors derived by factor analysis in that they exclude minor and summarise major variations. Even so dimensions derived from past factor analytical studies have varied. This is possibly due to the differences in leisure activities, analytic procedures or samples used. Sixtle (1967), (in Schmitz-Scherzer 1974), notes this dependency of factor analytical results on the subject and variable samples.

A conceptual problem also exists with factor analysis in that the results of cluster and factor analyses depend on what dependent variable is analysed. Early dependence on socioeconomic status and other demographic variables was found to be questionable when Mueller and Curin (1962) report that the cumulative effect of sex, age, occupation, religion and education account for only 30% of the variance in the measurement of outdoor recreational activities. A similar lack of ability to predict leisure behaviour from socioeconomic variables was noted by Berger (1963).

Several methodological problems also arise when using factor analyses. Beaman (1975) suggests that "factor analysis is only appropriate for grouping activities when the same activity organisation is appropriate for all subgroups in the sample". This would lead to difficulties in interpreting results where a sample is composed of subgroups differing in their perceptions of leisure activities. Factors may also arise due to dependency among the variables. It is difficult to discern if these are reflecting an underlying construct or are merely methodologically dependent. There is a problem in interpreting the meaning of high correlations among items. For example, a high correlation between two items may indicate that satisfaction with participation in the first activity is contingent on participation in the second activity rather than their being equal partners in the same 'factor' (Beaman 1975). Other types of dependencies occur when factor analysing scale scores where the scales have items in common or the scales are ipsative (Kass and Tinsley 1979).

A number of problems are present with factors from factor analyses that are based on participation ratings. Such analyses yield groupings of leisure activities with similar participation rates, but do little to clarify the dimensions of leisure behaviour. For example, factor analysis can not distinguish between two activities that may be chosen because they are complementary and coincidentally engaged in for similar periods of time. Yet their presence in the same factor suggests the activities themselves are similar. As a basis on which to classify activities, it is less useful than when the individuals' perceptions are considered, such as the needs satisfied, pleasure obtained, or how absorbing an activity may be. Using the respondents' expert knowledge, (i.e., about leisure activities which are relevant to that person), has been noted as yielding reliable and valid information (Borgen, Weiss, Tinsley, Dawis, Lofquist 1968). A final problem is that the investigator's structures are imposed on the data, through the choice of items, design of the instruments, and labelling of the factors.

At a time when much of the research is aimed at identifying substitutable activities, factor analysis would appear to be inappropriate.

In leisure research there has been a tendency to look at variables in isolation, thus ignoring probable interactions among them. Much of the failure to achieve replicable results could be due to this lack of consideration of contextual and related variables in a complex area. The relationships

between the outward appearances or manifestations of leisure time activities, and the underlying significance and meaning for the participants, have been taken into account in only a few studies. Yet this information is necessary if we are to answer such questions as: Are similar activities perceived differently by different groups of individuals? Do different activities have similar meanings for some people? Do people do the same activity for different reasons in different circumstances?

### 2.3 Aims

1a) This study aims to follow the trend of recent research as described in the literature review, by determining the individual's view of leisure activities and attempting a classification on that basis. It is hoped to determine the reasons why people engage in specific leisure activities, by using an intuitively simple analytical procedure based on frequency counts. A number of the problems with past research are obviated and analysis is simplified by this approach.

Three areas reflect the main emphases of this study:— individual differences; classification; and analysis. It is important to consider individual differences in the perception of activities and the needs that they satisfy. From this information, the leisure activities can be classified into groups on the basis of the main combinations of reasons why respondents engage in them. This is achieved by the analysis which identifies the most frequently chosen pattern of reasons

associated with each activity. Two key points here are parsimonious description and a meaningful classification. This study proposes a method of classifying leisure activities in a manner that illustrates the reasons that are psychologically relevant to the individual.

~~1b) The consequent aim of this is the identification of substitutable leisure activities. Substitutability is defined~~  
as "the interchangeability of recreation activities in satisfying participants' motives, needs and preferences" (Hendee and Burdge 1974). The identification of psychologically equivalent leisure attributes is important for people affected by, for example, aging, illness, geographic relocation, seasonal changes or a change in income level.

The assumption on which this approach is based is that the identification of the most appropriate activity for an individual will lead to the greatest satisfaction for that person. "Satisfaction depends on a person fulfilling their needs" (O'Morrow 1970, Wolf 1970).

2) A further objective is to determine the correlates of the leisure activities grouped by the combination frequency analysis, and the correlates of the responses made to a list of questions regarding the reasons why respondents engage in leisure pursuits in general.

3) A secondary aim is the investigation of the utility of Holland's theory of personality (Holland 1966, 1973) in

classifying leisure activities, and as a basis to investigate relationships across such life-spheres as work and leisure.

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## CHAPTER THREE

### METHODOLOGY

This chapter comprises five sections as follows:

#### 3.1 General Purpose and Design.

#### 3.2 Questionnaire.

##### (i) Introduction

##### (ii) Favourite Activities

##### (iii) Reasons for engaging in Leisure

##### (iv) Leisure Activities

##### (v) Demographic Data

#### 3.3 Sample and Procedure.

#### 3.4 Statistical Analyses

#### 3.5 Summary

#### 3.1 General Purpose and Design

The general purpose of the thesis was to identify why people engage in their leisure pursuits in general, and why they engage in the particular activities they are interested in. A questionnaire was administered to a random sample taken from Christchurch City area electoral rolls. The resultant data were subjected to analysis to identify groups of leisure activities engaged in for similar reasons.

#### 3.2 The Questionnaire

A survey using a questionnaire to collect data

was chosen for a number of reasons:

a) It was important to obtain a sizeable sample in order to obtain reliable results.

b) Given (a), a questionnaire is the least expensive and time-consuming approach (Borgen, Weiss, Tinsley, Dawis and Lofquist 1968).

c) The questionnaire has also been cited as yielding "reliable and valid information about individual differences and about the activity in general because it capitalises upon the knowledge of persons who participate in the activity regularly" (Borgen et al 1968 pp 113).

The questionnaire consisted of five sections:

- (i) An introduction.
- (ii) Questions regarding the respondents' favourite leisure activities.
- (iii) A section on the motivations that respondents regarded as important in their leisure time.
- (iv) A section gathering information on why specific leisure activities are carried out.
- (v) A number of questions designed to obtain demographic data.

(i) Introduction

The introduction described the questionnaire as looking at leisure activities and the reasons why they are enjoyable.



It gave the development of a Leisure Guidance Form as a possible outcome of this research and listed factors contributing to the need for such an instrument. Respondents were assured of confidentiality and thanked for their time. As a reminder to return the questionnaire, the statement: "Please return by xx/ABC/xxxx" was located in the top right hand corner. Finally, an example giving directions and illustrating how to fill out Section iv was given. This introduction included an exhortation for respondents "not to worry about how others might answer as what is important is why you do the activities". [See Appendices Ai to Av for the questionnaire]

### (ii) Favourite Activities

In an effort to assess underlying motivation, respondents were asked: "When you are free to do exactly as you please, what do you and/or would you do?". This question also helped obviate the fact that they might not have had the opportunity in the past to engage in the activity that they would most enjoy. They were then asked to fill in the open spaces below the question with their two favourite leisure activities and the reasons why they enjoyed them. [see Appendix Aii] The activities were coded on the basis of Holland's (1966, 1973) categories. The reasons given for why their activities were enjoyed were coded as one of 21 reasons presented in the questionnaire. These reasons are described in the following section.

(iii) Reasons for Engaging in Leisure

The twenty-one items in this section were derived from three sources. The most important source was London, Crandall and Fitzgibbon's (1977) list of attributes, which claim to measure the higher order need states specified by Maslow (1968) and also Alderfer (1972). London et al (1977) chose these on the presumption that most individuals have their basic physiological needs satisfied, and therefore the higher level needs would be more salient. However, it is difficult to determine if these more basic needs may still be either primary or secondary motivating forces in some activities.

London et al (1977) also utilised items derived from research in the field of organisational psychology. For example, they included some of Hackman and Oldham's (1975) task attributes such as feedback, variety and autonomy. These may well be useful in describing leisure activities, as well as providing a basis for examining relationships between leisure and other life-spheres such as work.

1. Items taken from London, Crandall and Fitzgibbons (1977);

Seeing the results of your efforts (Item 18)

Doing many different things (Item 14)

Using a variety of skills and talents (Item 14)

Significantly affecting the lives and well-being of others

Co-operating with other people (Item 10)

Developing close friendships (Item 9)

Feeling personal growth (Item 2)

Utilising full potential (Item 2)

Responsibility for making decisions (Item 1).

2. Items taken from Kabanoff (1981) and Crandall (1980);

Organise own projects and activities (Item 1)

Relax and take it easy (Item 3)

Enjoy family life (Item 6)

Have a change from daily routine (Item 7)

For excitement and stimulation (Item 11)

Test yourself in difficult or demanding situations (Item 1)

For health reasons (Item 16)

Keep physically fit (Item 16)

Gain respect or admiration of others (Item 17)

Be involved in competition (Item 12)

Organise teams, groups or organisations (Item 19).

3. Items taken from general leisure literature and results of pilot study;

To give me privacy/a chance to be alone (Item 4)

To relieve frustration (Item 5)

To fill in the time (Item 8)

Thinking/puzzling things out (Item 13)

To let me know what's going on/help me increase my knowledge and skills (Item 15)

"Other" category (Item 21)

Given the occasional overlap among items from these sources, some of the items were merged. Many were rewritten to some extent in order to meet the required purpose and format of this section [See Appendix Aiii].

Respondents were asked to read the list of reasons and to respond by indicating, (on a scale from one to five), how

important each item was for their leisure activities in general.

#### (iv) Leisure Activities

Thirty-two leisure activities were listed in this section. Respondents were instructed to mark the activities in which they were interested. The list of twenty-one reasons for engaging in an activity, (from the previous section), was presented with these thirty-two activities in a grid format. Respondents could then tick the appropriate reasons that applied to each of the leisure activities that they marked.

The majority of activities were based on Taylor, Kelso, Cox, Alloway, and Matthews' (1979) Leisure Checklist. This was developed to cover a wide range of activities which were then unanimously keyed by four judges as belonging to one of the six Holland (1973) codes; Realistic, Investigative, Artistic, Social, Enterprising or Conventional. Their findings "suggested that Holland's categories are sufficiently flexible to be applied not only to educational and vocational behaviours but also to the avocational domain" (Taylor et al., 1979: p204). Therefore, it is considered that this should be an excellent research tool for analyses that cross the boundaries among these spheres.

Support for using Hollands' categories was drawn from Melamed (1977), who found a high degree of similarity between group personality patterns on Holland's (1965) Vocational Preference Inventory (VPI) and group leisure patterns.

The 32 leisure activities in this section were also

derived from three sources.

Items taken from Taylor et al.'s (1979) Leisure Checklist were:

- 1) Swimming, boating;
- 2) Repairing or mending things;
- 3) Developing/processing photographs;
- 4) Playing a musical instrument or singing;
- 5) Taking part in Guides, Scouts, youth groups, etc.;
- 7) Earning some money selling things;
- 8) Bushwalking, hiking, camping;
- 9) Visiting scientific/technical displays or lectures;
- 10) Taking part in plays or musicals;
- 11) Planning and giving parties;
- 12) Following politics in the newspapers or on television and radio;
- 13) Collecting/cataloguing coins, stamps, photograph albums or scrap books;
- 14) Playing football, netball, hockey, cricket and other team sports;
- 15) Playing chess, draughts, bridge, scrabble or other games of skill;
- 16) Doing handcrafts such as pottery, weaving macrame;
- 17) Attending sports events, pop concerts, films etc., with a group of friends;
- 18) Doing small jobs such as gardening or housework for a fee;
- 19) Keeping detailed accounts or a careful diary;
- 20) Making things, like model aircraft, dresses, etc., using patterns or plans;

- 21) Watching/listening to "in-depth" reports or documentaries on radio or television;
- 22) Visiting art galleries, exhibitions, plays or concerts;
- 24) Playing backgammon, poker, monopoly other games of chance;
- 25) Using typewriters, calculators or similar equipment.

Further activities were added from London, Crandall, and Fitzgibbons (1977):

- 26) Watching television;
- 27) Reading/listening to music;
- 28) Fishing;
- 29) Skiing, horse-riding, squash and other solo sports.

The pilot study identified a need for a further four items;

- 23) Going to hotels and socializing;
- 30) Doing nothing in particular, "mucking about";
- 31) Gambling, horse-racing;
- 32) Driving for pleasure.

The considerable overlap that was observed in these sources, and the results of the pilot study, suggested that a reasonably exhaustive list of leisure activities had been identified.

Coding of this data has meant a loss of flexibility in some cases. For example, reading and listening to music is classified under Holland coding as belonging to the Investigative category. However, both reading and listening to music may be carried out for escapism or for learning.

A thirty-third final activity entitled "Your Job" was added. [see Appendix Aiv] This can be used in cross-sphere

comparisons, for example, between respondents' occupation and their primary leisure activity.

#### (v) Demographic Data

This section was designed to elicit information on sex, marital status, age, qualifications or education, occupation, and occupational satisfaction.

This information was gathered so that the correlates of specific types of leisure behaviour could be identified. Similarly, the demographic variables which are associated with particular reasons for engaging in leisure could be isolated. The data on occupation and occupational satisfaction are important in considering the relationships among between these two variables and leisure activities. Occupation was an open-ended question, subsequently coded in accordance with the New Zealand 1981 National Census classification, as well as the six Holland codes. Satisfaction with occupation was rated on a five point scale from "not satisfied" to "very satisfied". [See Appendix 1v]

Finally, space was provided for any additional comments the respondent cared to make. [see Appendix B for a list of the comments made by the respondents]

### 3.3 Sample and Procedure.

A pilot form of the questionnaire was completed by 20 people known to the author. Pilot results prompted the inclusion of further leisure activities and reasons for engaging in them. The presentation of the questionnaire was

also altered somewhat to clarify what was required of the respondents and to allow it to be more easily filled out.

The sample was randomly taken from the 1983 electoral rolls for Christchurch City, and the immediately surrounding areas of Waimairi, Paparua, Riccarton and Heathcote.

Seven hundred names were randomly generated. Of the 423 people that were able to be contacted by telephone, 84% agreed to participate in the study. Those who were unwilling cited reasons of poor health, little time, language difficulties or not interested. Seventy percent of the questionnaires mailed out were returned fully completed. This resulted in a final sample of two hundred and fifty people.

Unfortunately this sample under-represents those people without telephones, and those people whom had moved since the time the electoral roll was compiled.

A "due date" was marked on each of the questionnaires posted out. Subjects whose questionnaires were not received one week after this date received another telephone call. This first follow-up encouraged respondents to send in their questionnaires, and allowed them to discuss any problems. A final follow-up took place approximately two weeks after that date; respondents were once more reminded to return the questionnaire as soon as possible.

The final sample of two hundred and fifty was compared with 1981 Christchurch census data to test its representativeness.



Table 2  
Chi-square of Sample Data Compared  
With Christchurch Census Data.

	df	Critical Value at 0.05 level	Obtained Chi-square
Sex	1	3.84	1.14
Age	5	11.07	29.9
Marital Status	1	3.84	65.0
Education/Qualifications	2	5.9	88.7
Occupation	8	18.168	69.6

No significant difference was found between the observed and expected frequencies for sex. A difference was found for age, with the fifty to seventy categories being represented more highly than expected in the sample. Marital status differences indicated fewer "singles" and more "marrieds". Some differences occurred in the occupation analysis, with more commercial and professional representation, and less in the clerical and domestic/unemployed/retired/student categories among the respondents. The sample would have also been biased

towards people owning telephones, and people settled in an area. That is, transient people are more likely to have comprised the section of the sample which had moved since the time of compilation of the census, therefore they may not be adequately represented in this sample.

### 3.4 Statistical Analyses.

Initial analysis of the data looked at the frequencies of a number of the variables, including the thirty-three leisure activities, the reasons which were important for leisure in general, the respondents' reported favourite activities, and the reasons why these were engaged in.

The main analysis was also based largely on frequency counts, utilizing a computer to process the larger mass of data. Observation of the total number of ticks for each of the reasons enabled the identification of the most frequently chosen reasons for participation in each leisure activity.

To increase the power and scope of the analysis, these reasons for engaging in an activity were looked at in various combinations. The aim was to identify if there were specific sets of reasons that were common to most people engaged in each separate activity.

For example, every possible pair of reasons was considered. A computer programme was used to run through all possible combinations of two reasons, and to count the frequency at which each permutation occurred. The programme then listed the seven combinations that occurred most frequently. [See Appendix C for a listing of this programme]

For example,

Watching/Listening to 'in-depth' reports or  
documentaries on radio or TV.

Sample size = 137      Per cent of total sample = 54%

For single ticks:

15	1 raw frequency-	86	1 % of sample size-	62%
13	1 raw frequency-	57	1 % of sample size-	41%
3	1 raw frequency-	39	1 % of sample size-	28%
2	1 raw frequency-	26	1 % of sample size-	18%
8	1 raw frequency-	24	1 % of sample size-	17%
7	1 raw frequency-	20	1 % of sample size-	14%
1	1 raw frequency-	17	1 % of sample size-	12%

For groups of two reasons:

13	15,	1 raw frequency-	42	1 % of sample size-	30%
3,	15,	1 raw frequency-	24	1 % of sample size-	17%
3,	13,	1 raw frequency-	20	1 % of sample size-	14%
2,	15,	1 raw frequency-	20	1 % of sample size-	14%
2,	13,	1 raw frequency-	17	1 % of sample size-	12%
8,	13,	1 raw frequency-	16	1 % of sample size-	11%
8,	15,	1 raw frequency-	14	1 % of sample size-	10%

Note. 2. Personal development	13. Thinking/ Puzzling
3. Relax	15. Know what's going on
8. To fill in the time	

This procedure was carried out for combinations of three,

four, five, six, seven and eight reasons for participating in an activity. Again, the frequency of each of the possible combinations was noted and the top seven printed out.

A 'predominant pattern' of reasons was identified for each leisure activity. This was obtained in two stages. Firstly, the mean number of reasons cited by respondents interested in the activity was obtained. (This figure was refined by deleting the means of the top and bottom 5% of respondents. This was carried out to minimize the effect of extreme data.) Secondly, the most frequently occurring combination of the mean number of reasons was identified as the 'predominant pattern'. In the example given above, the mean number of ticks made by those people interested in 'in-depth' reports was two. Thus the predominant pattern associated with this activity is 13)Thinking/puzzling things out, and 15)To let me know what's going on/help me increase my knowledge and skills.

Such an analysis has the disadvantage of ignoring less frequent but still important patterns that may often be characteristic of a particular subset of people. However, as the current study is oriented toward leisure guidance, it is considered that the major pattern is the most appropriate to extract.

The significance of the predominant pattern was tested for by comparison with an upper frequency limit derived from a formula using 'k' the mean number of reasons ticked for that activity, and 'n' the number of reasons that were marked by at least five per cent of the sample. [see Appendix D]

Combinations that occurred more frequently than this limit do so at a significantly higher level than chance.

Once the predominant pattern that was most relevant to each leisure activity had been identified, and confirmed to be occurring at a statistically significant level, the activities could be grouped by clustering those carried out for similar sets of reasons. Leisure activities with a match of at least two common reasons were grouped together.

A similar procedure was also used to group the reasons. In this case grouping was on the basis of similar sets of associated leisure activities. [See Appendix E for the results of this analysis]

Principal components factor analysis with varimax rotation was performed for both leisure activities and reasons for leisure in general. This allowed comparisons to be made with analysis based on combination frequencies, and also with the results from past studies. Leisure activities factor analysed were those that the respondents indicated they were interested in and had done. Responses to the "Leisure in general" section of the questionnaire were also factor analysed to obtain factors of reasons why, or needs, which are relevant to leisure. [See Appendix F].

The correlation between groups of leisure activities derived from the combination analysis and the factors of activities from the factor analysis was computed. Similarly, the correlation between groups of reasons derived from the combination analysis and the factors of reasons from the

factor analysis was obtained. [See Appendix G for this latter correlation]

The groupings of leisure activities (from the combination analysis), were compared with a number of other variables to identify the correlates of the activities grouped in this manner.

~~Crosstabulation of the reasons why respondents engaged in~~  
~~leisure in general and their sex, marital status, age,~~  
education qualifications, occupation and occupational satisfaction was computed to identify the demographic variables which could be differentiated on this basis. Crosstabulation utilizing the Holland categories was also carried out. The relationship of the Holland code of the respondent's occupation to the code of their favourite leisure activity was examined. This latter crosstabulation was carried out to examine if the leisure activity codes were the same as the work codes or different, i.e. "generalisationary or compensationary" (Bishop and Witt 1970) Similarly a further crosstabulation looked at the relationship of the Holland code of the second favourite activity to the code of the respondents most favoured leisure activity. This was performed to investigate if respondent's top two leisure activities were of a similar nature, or if they varied. Such relationships would have a bearing on whether satisfactions are gained from an overall activity package (Buchanan 1983).

### 3.5 Summary

In summary, the main analysis attempts to identify a single pattern of reasons associated with each leisure activity. The activities can then be grouped on the basis of similar patterns. A factor analysis of the leisure activities is also computed in order to compare these two approaches to isolating 'factors' of activities.

Further analyses look at the correlates of these groups of leisure activities, and the correlates of the individual reasons listed in the questionnaire.

Crosstabulations are performed to investigate the utility of Holland's categories in examining the relationships between separate life spheres such as work and leisure. Finally, the relationships which may exist over the activities in an individual's 'leisure package' are examined.

## CHAPTER FOUR

### RESULTS

The results chapter is divided into four sections:

#### Frequencies

This section presents the most frequently chosen leisure activities. Also listed are the most popular reasons for respondents' leisure in general, and the most popular reasons for their reported favourite activities.

#### "Combination Frequencies" Analysis

This section describes the results of the analysis of leisure activities. Groups resulting from clustering on the basis of agreement of significant profiles are presented, followed by the factors derived from a factor analysis of the same data. Correlations of these groups with the factors derived from factor analysis is then given.

#### Breakdowns

This section presents the demographic variables which were significantly differentiated by the groups of leisure activities.

#### Crosstabulations

This section first compares respondents' ratings of the importance of reasons for their leisure activities in general with variables of sex, age, education/ qualifications, occupation, marital status,



satisfaction with occupation and favourite activity. Then the crosstabulations between respondents' occupations and favourite leisure activities, and between their favourite activities and their next preferred activity, are given.

### Summary

This section reviews the aims of the study, and summarises the results of the analyses which were used.

#### 4.1 Frequencies

The respondents marked the leisure activities they were interested in (and had done), and the reasons that were important for their leisure in general. The following identifies the most frequently chosen activities and reasons:

##### (1) Leisure Activities

The top five leisure activities and their frequencies are:

- (a) Reading/listening to music (70%)
- (b) Watching television (62.4%)
- (c) Watching/listening to "in-depth" reports or  
documentaries on radio or television (54.8%)
- (d) Swimming, boating (54.4%)
- (e) Bushwalking, hiking, camping (48.0%) (see

Appendix H for the complete list of

leisure activities).

## (2) Reasons for Engaging in Leisure in General

The top five reasons marked as important to the respondents for their leisure activities in general, and their frequencies, are :

(a) Seeing the results of my efforts/having a  
feeling of achievement (78.3%)

(b) Organising my own activities and being  
responsible for making my own decisions (70.1%)

(c) A change from daily routine (67.0%)

(d) Other category (66.7%)

(e) Relaxing and taking it easy (66.6%)

A further six reasons are indicated as being important by over 50% of respondents (see Appendix I for the complete list).

## (3) Reasons for Engaging in Favourite Leisure Activity

Respondents also indicated their reasons for engaging in their one favourite leisure activity. The responses to this open-ended question were coded on the basis of the list of reasons utilized in the questionnaire. [See Appendix Aiii]. The three most commonly given answers to this open-ended question are presented in terms of the overall first, second and third reason given.

(a) First: Relaxing and taking it easy (21.4%); For health reasons/to keep fit (11.6%); Seeing the results of my efforts/having a feeling of achievement (11.0%).

(b) Second: Relaxing and taking it easy (14.4%);

Challenge and/or excitement (12.7%); Seeing the results of my efforts/having a feeling of achievement (11.0%).

(c) Third: Getting to know new people/making close friendships (22.9%); Seeing the results of my efforts/Having a feeling of achievement (14.3%); To give me privacy/a chance to be alone (11.4%).

#### (4) Reason for Engaging in Second Favourite Leisure Activity

(a) First reason given: relaxing and taking it easy (21.3%); for health reasons/to keep fit (13.1%); getting to know new people/making close friendships (10.0%).

#### 4.2 'COMBINATION FREQUENCIES' ANALYSES

The combination frequencies analysis identified the predominant pattern of reasons associated with each of the leisure activities. Table 3 presents the activities grouped on the basis of those predominant patterns. Specifically, activities associated with patterns which have at least two elements in common have been grouped together. Not all of the leisure activities are included in the table. Those activities presented here were selected on the basis of three criteria:

- 1) that the activity was chosen by at least 20% of the total sample.
- 2) that the predominant pattern of reasons was chosen by at least 20% of the people interested in that leisure activity.
- 3) and that the predominant pattern was statistically significant.

The groups of activities are presented separately, showing the predominant profile of reasons associated with each leisure activity. The reasons these activities have in common are listed at the top of the group. The other reasons in the profiles can be referred to at the foot of the table.

~~The accompanying labels have been chosen after observation of the characteristics of the activities in each group, and after consideration of the associated reasons that these activities have in common.~~



Common Reasons		a)3. To Relax		b)4. Privacy	
27. Reading/listening to music	3	4	5		
30. Nothing in particular	1	3	4		
28. Fishing	3	4	7	11	
26. Watching television	3	8			

LACOMB 4		(SPORTS)					
Common Reasons							
a)11. Challenge		b)16. Health/To Keep Fit					
29. Solo sports	11	16					
14. Team sports	9	10	11	12	14	16	

LACOMB 5		(LEARNING)	
Common Reasons			
a)13. Think/Puzzle		b)15. Know whats going on	
12. Follow politics in media	13	15	
21. In-depth reports in media	13	15	

- |                            |                                   |
|----------------------------|-----------------------------------|
| 1 ORGANIZE OWN ACTIVITIES  | 12 COMPETITION                    |
| 2 FEEL PERSONAL DEVEL.     | 13 THINKING-PUZZLING THINGS OUT   |
| 3 RELAX                    | 14 USE + DEVEL. DIFF. SKILLS      |
| 4 PRIVACY                  | 15 INCREASE KNOWLEDGE, KNOW WHATS |
| 5 RELIEVE FRUSTRATION      | 16 HEALTH AND EXERCISE, KEEP FIT  |
| 6 ENJOY FAMILY LIFE        | 17 GAIN RESPECT OF OTHERS         |
| 7 CHANGE FROM ROUTINE      | 18 SEE THE RESULTS OF MY EFFORTS  |
| 8 FILL IN THE TIME         | 19 ORGANIZE TEAMS                 |
| 9 GET TO KNOW OTHERS       | 20 INFLUENCE OTHERS WELL-BEING    |
| 10 COOPERATING WITH OTHERS | 21 OTHER REASONS                  |
| 11 CHALLENGE/EXCITEMENT    |                                   |

The groups of leisure activities can be seen to have relatively distinctive sets of common reasons. However, there is some overlap among these groups, for example, LACOMB 1 and LACOMB 3 which have 'To relax' in common. Nevertheless, the group of activities in LACOMB 1 suggest relaxation in a social setting, for example, 'Hotels and socializing' and 'Events with friends', whereas the activities in LACOMB 3 suggest relaxation in a more private setting, for example, 'Reading/listening to music'. These two groups have therefore been labelled Social and Solitary respectively. The only activity which appears ill-placed here is 'Collecting/cataloguing' which is in the social group whereas it would seem to be more apt to be in the solitary group.

The activities in the second group, LACOMB 2, are performed for the common reasons of 'Challenge' and to 'Use and develop different skills'. It would appear that a wide

range of activities can satisfy these reasons, i.e. games, of both chance and skill, sports, crafts and practical pursuits are all included in this group. Other prominent reasons in the associated profiles include 'Competition' and 'To see the results of my efforts'. The label Games was chosen for this group of activities to describe the type of activities which test and challenge people in an enjoyable way. The structure of most games allows participation and the possibility of improvement without an over-riding burden of potential failure.

'Sports' was easily chosen as a label for the two activities in LACOMB 4. These two activities, 'solo sports' and 'team sports', were engaged in for the common reasons of 'Challenge' and 'To keep fit'. 'Team sports' has a number of reasons in its profile which are not repeated in the profile accompanying 'solo sports', but which are obviously still an integral facet of participation in this activity. The inclusion of 'team sports' in the games group of activities would appear to cater for this aspect.

LACOMB 5 contains activities which are engaged in for the common reasons of 'Thinking/puzzling things out' and to 'Increase knowledge/know whats going on'. These activities appear to be engaged in for reasons of curiosity and the desire to learn more, and have been labelled accordingly as 'Learning'.

Table 4 presents the principal components analysis of the same data as used in the 'combination frequency' analysis. The



results of these two approaches are correlated further below.

TABLE 4.

Principal Components Analysis: Of the Leisure  
Activities Indicated By At Least 20% of the Sample.

(NFACTORS=5; from Eigen values >1.0).

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5
	(Learning)	(Social)	(Arts)	(Practical)	(Skill)
1- SWIMMING	0.59036*	0.17747	-0.03977	-0.26067	-0.00881
2- REPAIRING	-0.09906	0.27298	0.13609	0.41783*	0.08893
4- PLAY/SING	0.62864*	-0.15060	0.00414	-0.37921*	-0.01937
11- PLANNING PARTIES	-0.00737	0.60294*	0.28141	0.09499	-0.00843
12- POLITICS-MEDIA	0.73304*	-0.13833	-0.08315	0.07825	-0.06189
13- COLLECTING	-0.01452	0.12705	0.25981	0.15262	0.37883*
14- TEAM SPORTS	-0.12909	0.40853*	0.18915	0.04724	0.13107
15- GAMES OF SKILL	-0.02235	0.29253	0.18435	0.11839	0.83848*
16- HANDCRAFTS	-0.15300	0.07695	0.63954*	-0.09660	0.14862
17- EVENTS - FRIENDS	-0.06081	0.66882*	0.16794	0.07018	0.10833
20- USING PATTERNS	0.65788*	-0.18248	-0.04062	-0.35115*	0.01621
21- IN-DEPTH REPORTS	0.68798*	-0.11042	0.00653	0.14602	-0.13478
22- VISIT ART, PLAYS	0.00694	0.27171	0.60739*	0.25456	0.11077
23- HOTELS-SOCIALIZE	-0.08752	0.64407*	-0.10502	0.40335*	0.09056
24- GAMES OF CHANCE	-0.03644	0.49394*	-0.01594	0.26867	0.21155
26- WATCH T. V.	0.68448*	0.13878	-0.17448	0.05767	0.01718
27- READING-MUSIC	0.66327*	-0.02939	0.16157	-0.01198	0.13696
28- FISHING	-0.05570	0.19135	0.09286	0.43232*	0.11253

29- SOLO SPORTS	-0.08347	0.45896*	0.38948*	0.15235	0.17272
30- MUCKING ABOUT	0.62780*	-0.25953	-0.22456	-0.18401	-0.08208
32- DRIVING	0.63297*	-0.13433	-0.29904	-0.10196	-0.06769

NOTE. \* = Loadings greater than 0.3500.

The top two loadings on Factor 1 are 'Following politics in the media' and 'Watching/listening to in-depth reports in the media'. These suggested a Learning factor. This label is supported by other highly loading activities, although perhaps in a different sense. These other activities are 'Watching television', 'Reading/listening to music' and 'Making things using patterns'. Activities having a less clear relationship with those already mentioned, albeit still loading greater than 0.3500 on this factor, are 'Driving for pleasure', 'Playing an instrument/singing', 'Mucking about' and 'Swimming'.

Factor 2 loads most highly with 'Events with friends', 'Hotels and Socializing' and 'Planning parties' and is thus labelled Social. Also loading on this factor is 'Team sports', 'Games of chance' and 'Solo sports'. This latter activity, whilst appearing out of place in a social factor, may often have a social element to it.

'Handcrafts' and 'Visiting art galleries or concerts' load most highly on Factor 3, which is therefore labelled Arts. A further activity of 'Bushwalking' could be described as having an aesthetic component, whereas the relationship of 'Solo sports' to the Arts factor is less clear.

Factor 4 is the most difficult group of activities to label, with none of the loadings extending beyond 0.4500. 'Fishing', 'Repairing things' and 'Bushwalking' feature in this factor suggesting a Practical component, however, 'Hotels and socializing' does not appear to support this label. Two negative loadings on this factor are 'Playing a musical instrument' and 'Making things using patterns', the latter activity also does not support the assigned label.

Finally, the major loading on the fifth factor, labelled Skill, is 'Games of skill'. The only other loading on this factor, over 0.3500, is 'Collecting/ cataloguing' which also involves some measure of skill.

Table 5 presents the correlation of the leisure activities grouped by the above two methods. That is, the groups of leisure activities, LACOMB 1 to LACOMB 5, grouped on the basis of common elements in the predominant profiles associated with each of the activities correlated with the factors of leisure activities, LAFAC 1 to LAFAC 5, which are comprised of those activities that load higher than 0.3500 on each of the factors.

Table 5.  
Correlations of Leisure Activities  
(grouped by predominant profile) With  
Leisure Activities (grouped by factor analysis).

	LAFAC1	LAFAC2	LAFAC3	LAFAC4	LAFAC5
	(Learning)	(Social)	(Arts)	(Practical)	(Skill)
LACOMB1	-0. 2373	0. 8068	0. 6611	0. 4766	0. 6063
(Social)	(P=0. 000)	(P=0. 000)	(P=0. 000)	(P=0. 000)	(P=0. 000)
LACOMB2	0. 1261	0. 5666	0. 5368	0. 1287	0. 5699
(Games)	(P=0. 023)	(P=0. 000)	(P=0. 000)	(P=0. 021)	(P=0. 000)
LACOMB3	0. 8217	---	-0. 1205	-0. 1388	---
(Solitary)	(P=0. 000)		(P=0. 029)	(P=0. 014)	
LACOMB4	-0. 2488	0. 7955	0. 6712	0. 3864	0. 3853
(Sports)	(P=0. 000)	(P=0. 000)	(P=0. 000)	(P=0. 000)	(P=0. 000)
LACOMB5	0. 8007	-0. 1801	-0. 1918	-0. 3255	-0. 1109
(Learning)	(P=0. 000)	(P=0. 002)	(P=0. 001)	(P=0. 000)	(P=0. 040)

Note. '---' = no significant correlation.

The majority of the correlations between these two groupings of leisure activities are highly significant. Those groups of activities which were headed with the same labels

show high correlations, namely, LACOMB 1 (Social) with LAFAC 2 (Social): (0.8068), and LACOMB 5 (Learning) with LAFAC 1 (Learning) : (0.8007). The grouped activities labelled Solitary(LACOMB 3) also correlated highly with this latter factor LAFAC 1(Learning): (0.8217). LAFAC 1 contains two of the leisure activities which are also in the Solitary group of activities, i.e. 'Reading/listening to music' and 'Watching television'.

The Social, Games and Sports groups of activities, LACOMB 1, 2 and 4 respectively, exhibit medium to high correlations over more than one of the leisure activity factors. As mentioned the Social group correlates highly with the Social factor, however it also correlates with the Arts factor (LAFAC 3), and the Skill factor (LAFAC 5). The activity which is common to the Social group and the Arts factor is 'Visiting art galleries and concerts', while 'Collecting/cataloguing' is common to the Social group and the Skill factor.

Activities in the Games group of leisure activities are matched by activities in three factors; Social(LAFAC 2), Arts(LAFAC 3) and Skill(LAFAC 5). That is, 'Team sports' and 'Games of chance' in LAFAC 2; 'Handcrafts' in LAFAC 3; and 'Games of skill' in LAFAC 5.

Finally, all the activities in the Sports group are also found in the Social factor(LAFAC 2), i.e. 'Team sports' and 'Solo sports'. 'Solo sports' is also found in the Arts factor(LAFAC 3).

#### 4.3 Breakdowns

This section considers the relationships of the groups of leisure activities, (LACOMB1 to LACOMB 5), with the demographic variables.

The breakdown procedure was utilized to ascertain how the demographic variables were differentiated by the groups of leisure activities. This analysis identifies the means for each subset, thus indicating the direction of the difference.

A one way analysis of variance is performed to test if the means of subsets within each of the variables are significantly differentiated, and reports the F-ratios and accompanying level of significance.

Table 6 lists the activities that comprise each of the leisure activity groupings used in this analysis.

Table 6.

LACOMB 1-5: Groups of Leisure Activities (grouped by  
Predominant Profile) Used in the Breakdown Analysis.

#### LACOMB 1 (SOCIAL)

Collecting/cataloguing  
Events with friends  
Art galleries/concerts  
Hotels and socializing

#### LACOMB 2 (GAMES)

Playing team sports  
Games of skill  
Handcrafts  
Use plans/patterns  
Games of chance

LACOMB 3 (SOLITARY)	LACOMB 4 (SPORTS)	LACOMB 5 (LEARNING)
-----	-----	-----
Watching television	Play team sports	Follow politics-media
Reading/music	Solo sports	In-depth reports-media
Fishing		
Nothing in particular		

Tables 7a, 7b, and 7c present the results of the breakdown analysis. The subset(s) within each variable indicating significantly more interest and participation in the activities in the leisure activity groupings are reported. The F-ratio, indicating the extent of the difference, is also given. All the results that are reported below are significant to the 0.01 level, that is,  $P < 0.05$ . These tables may also be read across the page to identify the demographic correlates of participation in each of the leisure activity groupings.

Table 7a.  
Breakdown of Groups of Leisure Activities  
By Sex, Age and Marital Status.

Demographic Data			
Leisure Activity Groups	Sex	Age	Marital Status
Social (LACOMB 1)	Males(F=32.53)	21-30, 31-40 41-50: (F=13.62)	Single(F=15.31)
Games (LACOMB 2)		31-40, 21-30 (F=11.03)	
Solitary (LACOMB 3)		51-60: (F=12.17)	Married(F=11.11)
Sports (LACOMB 4)	Males(F=26.00)	21-30, 31-40 41-50: (F=15.35)	Single(F=6.52)
Learning (LACOMB 5)	Females(F=10.01)	51-60: (F=16.38)	Married(F=17.05)

Significant sex differences are found on three of the leisure activity groupings. Males indicate the social and



sports groups of activities more often than females. Females, however, report learning activities more frequently than do males.

Age effects are noted on all the leisure activity groupings. Respondents in the 21-30, 31-40 and 41-50 age categories indicated the social and sports activities most frequently. People in the 21-30 and 31-40 categories also indicated the games activities more often than the other age ranges. Respondents in the 51-60 age group report the solitary and learning activities most frequently.

Four significant marital status differences are noted. Single respondents indicate the social and sports groups of activities most frequently. Married people report interest and participation in the solitary and learning groups of activities more often than do single respondents.

Table 7h.  
Breakdown of Groups of Leisure Activities  
By Education, Occupation and Occupational Satisfaction.

Demographic Data			
Leisure Activity Groups	Education	Occupation	Occupational Satisfaction
Social (LACOMB 1)	Tertiary, Trade C. U. E. (F=21.01)	Trade, Clerical (F=7.39)	Dissatisfied (F=5.86)
Games (LACOMB 2)	U. E., Tertiary High Sc. (F=2.25)	Service, Clerical Trade (F=4.53)	Dissatisfied (F=4.47)
Solitary (LACOMB 3)	School C., Trade C. High Sc. (F=9.82)	Professional Trade (F=3.09)	Satisfied (F=5.37)
Sports (LACOMB 4)	Tertiary, Trade C. U. E. (F=13.54)	Trade, Service, Co- mmercial (F=5.35)	Dissatisfied (F=7.45)
Learning (LACOMB 5)	School C., Tertiary (F=17.85)	Professional (F=11.10)	Satisfied (F=11.93)

Significant differences are found for these three variables, Education/ qualifications, occupation and

satisfaction with occupation, on all the leisure activity groupings. Respondents with tertiary, trade certificate, or U.E. qualifications indicate a greater preference for social and sports activities. Respondents with tertiary, U.E. or high school qualifications also indicate the activities in the games group more often than those holding other qualifications do. Tertiary and school certificate qualified respondents indicate the learning activities most often. Solitary activities are preferred more often by respondents holding school certificate, trade certificate or high school qualifications.

The clearest differentiation on the basis of occupation is that professional people report the learning activities more often than the other occupational groups. Respondents in trade occupations are identified as having interest and relatively frequent participation in all of the other leisure activity groupings. They are joined by professional people in the solitary activities, clerical people in social activities, service and clerical people in games activities and service and commercial respondents in sports activities.

Satisfaction with occupation is seen as being associated with a preference for solitary and learning activities. However, those respondents who were not satisfied with their occupation report social, games and sports activities more frequently than do respondents who are satisfied with their occupation.

Table 7c.  
Breakdown of Groups of Leisure Activities By  
Favourite Leisure Activity: Holland Codes,  
Retirement Quiz, N. Z. Classification.

Demographic Data

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Leisure	Holland Codes	Retirement Quiz	N. Z. Classification
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Activity

Groups

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Social (LACOMB 1)	Enterprising Artistic (F=9.53)	Social, Practical Creative (F=12.49)	Team Sports, Artistic (F=6.34)
Games (LACOMB 2)	Artistic, Social Enterprising (F=2.80)	Social (F=4.18)	
Solitary (LACOMB 3)	Investigative (F=12.06)	Intellectual) (F=15.71)	Casual, Learning (F=10.26)
Sports (LACOMB 4)	Social, Realistic Enterprising (F=9.13)	Outdoor-Active (F=13.00)	Team sports, Artist- ic, Small groups (F=7.28)
Learning (LACOMB 5)	Investigative (F=14.19)	Intellectual (F=18.28)	Casual, Learning (F=9.99)

---

This last table is perhaps best interpreted in terms of the categories of each coding system that are associated with the leisure activity groupings. These three systems; Hollands, the Retirement Quiz and the New Zealand Classification of Leisure Activities, have been used in coding the activity that respondents reported as being their favourite leisure activity.

Table 7c indicates the categories within each of these three classification systems which are associated with the activities in each of the LACOMB groupings. Thus, as can be seen in the table, those people who report interest and participation in the social group(LACOMB 1) report activities in the Enterprising and Artistic codes of the Holland coding system as their favoured activity. They also report activities that are in the social, practical and creative categories in the retirement quiz and activities classified as team sports and artistic under the N.Z. classification system.

Respondents indicating Games activities(LACOMB 2) have their favoured activity coded as artistic, social or enterprising in the Holland codes, and social in the retirement quiz.

LACOMB 3, the solitary group, is associated with Holland's investigative category, the intellectual category in the retirement quiz and the casual and learning categories in the N.Z. classification. Respondents indicating activities in the sports group(LACOMB 4) also indicated activities coded as social, enterprising and realistic (Holland); outdoor-active (retirement quiz); and team sports, artistic and small groups (N.Z.

classification) as their favourite leisure activity. Respondents reporting activities in the learning group (LACOMB 5) are associated with investigative (Holland); intellectual (retirement quiz) and casual and learning (N.Z. classification) activities.

#### 4.4 Crosstabulations

A crosstabulations is a joint frequency distributions of cases according to two or more classificatory variables. These joint frequency distributions can be statistically analysed by certain tests of significance such as the chi-square statistic, to determine whether or not the variables are statistical independent (Nie et al 1975).

Responses indicating the importance of the 21 reasons for engaging in leisure in general, were crosstabulated with sex, age, education qualifications, occupation, marital status, satisfaction with occupation and reported favourite leisure activity. Those reasons which significantly differentiate the subsets within these demographic variables are reported.

Tables Ba, Bb and Bc present the results of this analysis. The subset(s) within each variable that attributed significantly more importance to the reasons are listed with an accompanying chi-square indicating the degree of variance from the expected pattern. All results can be assumed to reach a level of significance greater than 0.01, except where otherwise indicated by an asterix (\*).

This identifies results which are significant to the 0.05 level

Table 8a.  
Crosstabulation of [Importance of] Reasons For Leisure  
Activities With Sex, Age and Marital Status.

Demographic Data			
Leisure Activity Groups	Sex	Age	Marital Status
Feel personal development and growth.	Females (Chi=5.79*)		
Relaxing.		Decreases in import. over age (Chi=21.40)	
Enjoy family life.		Low for <30's and 41-50's. High for others (Chi=39.58)	Married (Chi=22.65)
Fill in time.		Increases with age (Chi=31.14)	

Meet new people. Females  
(Chi=22.22\*)

Cooperate with Females  
others. (Chi=6.08\*)

Challenge/excite.	Decreases with	Single
	age(Chi=32.58)	(Chi=6.19*)

Competition.	Males	Decreases with
	(Chi=8.26*)	age(Chi=24.68)

Think/puzzle.	Increases with	Married
	age(Chi=32.58)	(Chi=8.72)

See results of	High 21-30, 51-60
my efforts.	and >70. Low at
	41-50, 61-70.
	(Chi=26.48)

Females rate three reasons as more important than males did. These are 'Getting to know new people', 'cooperating with others', and 'feeling positive personal development'. Males find to be 'involved in competition' more important than females.

'To help me enjoy family life' was rated as important by respondents in the 31-40 age range, and by people over 50.



Other results show more of a graduated scale of importance. That is, the importance of 'Challenge and/or excitement', 'To be involved in competition' and 'Relaxing and taking it easy' decrease as age increases. Secondly, the indicated importance of 'Filling in time' and 'Thinking/puzzling things out' increases with age.

Three significant effects are noted for the marital status variable. Single people report 'Challenge and/or excitement' as more important than married respondents do. Married people attribute greater importance to 'Help me enjoy family life' and 'Thinking/puzzling things out'.

Table 8b.  
Crosstabulations of [Importance of]  
Reasons For Leisure Activities  
With Education, Occupation and  
Occupational Satisfaction.

Demographic Data			
Leisure Activity Groups	Education	Occupation	Occupational Satisfaction
Enjoy family life.			Not import. for Dissatisfied's (Chi=15.97)
Cooperate with others.		High import. for Production. Low for Clerical. (Chi=24.89*)	Not import.. for Dissatisfied's (Chi=21.07)
Being in a position where I can influence the well-being of others.	Increases in importance the 'higher' the education. (Chi=22.19)		Not import. for Dissatisfied's (Chi=11.12*)

Only one reason differentiates among each of the education/qualifications and occupation variables. These are 'Being in a position where I can influence the lives or well-being of others', which increases in importance the 'higher' the education code, and 'Cooperating with others' which is rated as highly important by respondents in the Production category, but as being of low importance by respondents in the Clerical category.

Three of the reasons are marked as not important by people who are dissatisfied with their occupation. These three reasons are: 'Cooperating with others', 'To help me enjoy family life' and 'Being in a position where I can influence the lives or well-being of others'.

Table 8c.

Crosstabulations of Importance of Reasons For  
Leisure Activities With Favourite Leisure Activity;  
Holland, Retirement quiz, New Zealand Classification.

## Demographic Data

Leisure Activity Groups	Holland Code	Retirement Quiz	New Zealand Classification
Challenge/excite.	Not import. for Investigative (Chi=20.22*)	Import. for Outdoor (Chi=24.25*)	Import. for Small group/ Individual. (Chi=34.82*)
Competition.	Not import. for Artistic or Investigative (Chi=46.09)	Import. for Outdoor (Chi=47.67)	Import. for Small group/ Individual. (Chi=96.19*)
For health/to keep fit.	Not import. for Artistic (Chi=26.53)	Import. for Outdoor (Chi=22.04*)	Import. for Small group/ Individual, Team sports. (Chi=52.95)

Three reasons differentiate the subsets of these three coding systems. 'To be involved in competition' is indicated as being important for the people whom have their favourite activity coded as Small group/ individual sporting (N.Z. Classification) or Outdoor (Retirement Quiz), and as not important for those people whose favourite activity is coded as Artistic or Investigative (Holland).

'For health reasons/to keep fit' is an important reason for the leisure activities of people whose favourite activity is coded as Outdoor (Retirement Quiz), Team sports or Small group/individual activities (N.Z. classification) but is not important for Artistic respondents (Holland).

Finally, 'Challenge and/or excitement' is seen as most important for Small group/individual activities (N.Z. Classification) and Outdoor activities (Retirement Quiz), but not so important for respondents whose favourite leisure activity is coded as Investigative (Holland).

Crosstabulation was also carried out between the respondents' occupation and their favourite leisure activity. The table below illustrates the percentage of people in each occupational category that chose an activity in each of the Holland categories as their favourite leisure activity.

Table 9.

Crosstabulation Respondents' Occupation  
By Favourite Leisure Activity.

OCCUPATION	FAVOURITE LEISURE ACTIVITY					
	REALISTIC	INVESTIG	ARTISTIC	SOCIAL	ENTERPRI	
	ATIVE			SING		
REALISTIC	65.0%	20.0%	0.0%	0.0%	15.0%	
INVESTIGATIVE	71.4%	28.6%	0.0%	0.0%	0.0%	
ARTISTIC	60.0%	0.0%	40.0%	0.0%	0.0%	
SOCIAL	21.7%	34.8%	28.3%	6.5%	8.7%	
ENTERPRISING	8.3%	85.1%	0.0%	1.7%	5.0%	
CONVENTIONAL	34.2%	42.1%	5.3%	13.2%	5.3%	

(CHI SQUARE = 130.52533 WITH 20 DEGREES OF FREEDOM SIGNIFICANCE = 0.0000)

Apart from people in Realistic occupations, who favour Realistic leisure activities, respondents appear to favour

leisure activities which are of a different Holland code to that of their occupation.

The following table shows the percentage that each of the Holland categories were chosen as the next favourite activity for people divided into Holland groups on the basis of their first choice of leisure activity.

Table 10.

Crosstabulation Respondents' Favourite Leisure Activity

By their Next Favourite Leisure Activity.

FAVOURITE LEISURE ACTIVITY:	NEXT FAVOURITE LEISURE ACTIVITY					
	REALISTIC	INVESTIGATIVE	ARTISTIC	SOCIAL	ENTERPRISE	CONVENTIONAL
REALISTIC	44.2%	25.0%	9.6%	5.8%	9.6%	5.8%
INVESTIGATIVE	80.1%	3.5%	6.4%	2.8%	4.3%	2.8%
ARTISTIC	29.4%	29.4%	23.5%	5.9%	11.8%	0.0%
SOCIAL	20.0%	30.0%	10.0%	10.0%	10.0%	20.0%
ENTERPRISE	33.3%	33.3%	6.7%	0.0%	13.3%	13.3%

(CHI SQUARE = 64.21320 WITH 20 DEGREES OF FREEDOM SIGNIFICANCE = 0.0000)



The 'conventional' category in the favourite activity variable was recoded as a missing value due to very low numbers of respondents in that category.

Again, no clear patterns emerge, however it appears that respondents next preferred leisure activity is of a different Holland code to that of their favourite activity.

#### 4.5 Summary

Frequency tables identified the leisure activities which were indicated by the respondents most often, (Reading/listening to music 70%; Watching tv. 62.4%), as well as the reasons for leisure in general (See the results of my efforts 78.3%; Organize my own activities, 70.1%). The major reasons reported for engaging in their first and second favourite activities were also listed.

The combination frequency analysis isolated a predominant pattern of reasons for each leisure activity. The activities were then able to be grouped on this basis. These groupings were compared with a factor analysis of the same data. This resulted in a number of high correlations which suggests similar dimensions were measured.

A breakdown analysis identified the demographic variables which were significantly differentiated by the leisure activities grouped in this way. These results were reported in tabular form, which, by reading across the table, allowed the identification of demographic profiles associated with the leisure activity groups. For example, males, single people and

the younger age groups all indicated the activities in the social group significantly more often than their counterparts.

The crosstabulation identified the demographic variables which were differentiated by the reasons for engaging in leisure. Again, some profiles emerged across the tables. For example, married respondents indicated 'Thinking/puzzling things out' as being more important than the singles did. The importance of this reason for engaging in leisure activities was also seen to be increasing with age.

Further crosstabulations used the Holland categories; Realistic, Investigative, Artistic, Social, Enterprising and Conventional, to examine the relationship between the respondents occupation and most preferred leisure activity. The relationship between the Holland code of the first and second preferred activities was studied. Respondents appeared to favour leisure activities which were of a different Holland code to that of their occupation. A difference in the Holland codes was also found between respondents' first and second leisure activity.

## CHAPTER FIVE

### 5.1 DISCUSSION

There are four sections to this chapter. The first, major, section discusses the results. This is followed by a review of the limitations of the study. Recommendations are then made in the light of the original aims and the results of this study. A brief summary of the discussion concludes the chapter.

Reports of the most frequently chosen leisure activities, among this Christchurch sample, suggests that passive entertaining pursuits and gathering information from the media are the most popular, closely followed by the accessible outdoor activities of Swimming/boating and Bushwalking/hiking and camping. The top two reasons given for engaging in leisure point toward the important functions that leisure pursuits can fulfill for people, namely 'Seeing the results of my efforts/having a feeling of achievement' and 'Organizing my own activities and being responsible for my own decisions'. The high importance attributed to these two reasons could stem from the next most important reason for engaging in leisure which is 'Change from daily routine'. The next most frequently chosen reason was found to be the 'Other' category suggesting that some important reasons may have been omitted in the list used in the present study. The fifth highest reported reason for leisure activities is 'To relax and take it easy'. This perhaps reflects the importance of the need to unwind from the pressures of daily living and to spend some time at ease.

The activities which were rated most highly overall, can also be compared with the reasons that respondents gave for their favourite activity. The latter contain some reasons which did not feature in the overall frequency list of reasons, for example 'for health/to keep fit' and 'to meet new people'. These reasons which were associated with the respondent's favourite leisure activity may reflect more realistic subsets of people than the highest reported reasons in general do. The three reasons mentioned as being associated with the first reported activities include 'relaxing/taking it easy', 'for health/to keep fit' and 'seeing the results of my efforts'. They are quite distinct and yet they are all reported as the major reason for respondent's favourite activity. Perhaps these reflect the major motivations of three subsets of people. Comparisons of these subsets can also be made with the reasons associated with the next preferred leisure activity. However the numbers of people who indicated second or third reasons for their second favourite activity dropped sharply in this study.

The analysis using the pattern of response made by each respondent readily resulted in clear predominant patterns of reasons associated with most of the leisure activities. Unfortunately not all of the activities could be classified due to their failing to meet one of three criteria that were imposed to increase the validity of the results. These were that at least 20% of the sample had engaged in the activity and were interested in it, that at least 20% of those people interested in that activity had chosen the predominant pattern, and that the

predominant pattern was statistically significant.

The identification of a predominant pattern enabled the formation of five distinctive groups of leisure activities on the basis of the reasons why they were engaged in. These were labelled Social, Games, Solitary, Sports and Learning on the basis of the leisure activities they contained and the common reasons on which they were grouped. These five groupings showed considerable agreement with the five factors that resulted from a factor analysis of the same data. Social (LACOMB 1) correlated 0.8068 with the Social factor (LAFAC 2), and Learning (LACOMB 5) correlated 0.8007 with the Learning factor (LAFAC 1). However, the activities in the Social group also correlated with the Arts factor (0.6611), and the Skill factor (0.6063). The latter factor, Skill, includes games of skill which could be seen as a social activity, but there are no obviously socially oriented activities in the Arts factor. Games (LACOMB 2), which includes team sports and handcrafts, appeared to be split over the Social factor (LAFAC 2), 0.5666, Arts (LAFAC 1), 0.5699 and Skill (LAFAC 5), 0.5368. The grouped activities labelled Solitary (LACOMB 3) correlated clearly, mainly with the activities in the factor labelled Learning, 0.8217, as did the activities grouped in LACOMB 5-Learning (0.8007). These two LACOMB groups, Solitary and Learning, had similar correlations over the rest of the leisure activity factors, suggesting considerable similarity. However, observation of the Solitary and Learning groups of activities show them to be carried out for distinct groups of reasons. Perhaps these reasons overlap on occasion. The Sports grouping (LACOMB 4) correlated well, 0.7955, with the Social

Factor (LAFAC 2), and also with the Arts factor 0.6712, which included solo sports.

In comparing results among various studies it is inevitable that differences will arise due to varying samples, procedures and analyses used. However, a number of the factors reported in past research appear to be replicated here. Activities found in the Social group are also found in Allen's (1980) social interaction factor and Jih-Min Yu's (1980) Factors 1 and 5. The Games group is comprised of activities found in Allen's (1982) Hobby-Domestic factor, London et al's (1977) Productive-Intellectual factor and both of the Crafts and Mechanics factors in McKechnie's (1974) study. The activities in the Solitary group parallel Jih-Min Yu's (1980) Factor 2, and Witt's (1971) aesthetic-sophisticate group of leisure activities. The Sports group of leisure activities reflect those in the sports factors of Allen (1982) Howard (1966), London et al (1977), McKechnie (1974) (neighbourhood sports), and Witt (1971). The Learning group reflect McKechnie's (1974) Intellectual factor and some of Allen's (1982) Cultural-Intellectual activities.

The closest approximation of the present results to those from past studies appears to be to the factors found by Allen (1982). He found nine factors but the first four accounted for the majority of the variance. A large range of leisure activities (51 items) was used and the analysis utilized interest ratings. Thus both studies have analysed a wide variety of activities on the basis of respondents' expressed interest. The present study sheds further light on why these groupings

resulted, by identifying the common reasons for interest in each group of leisure activities.

The strength of these results lies in the clear manner in which the classification of the activities was derived. The combination of raw data with the arithmetic power of a computer has enabled statistically significant results to be obtained from the data without the data having to be reduced, or possibly transformed to a manageable size by the use of traditional statistical methods or formulae.

Activities grouped together on the basis of their being performed for similar reasons also have a greater chance of being substitutable for each other than say, the activities within a factor resulting from an analysis of data based on participation rates.

There is a general lack of reported correlates of groups of leisure activities in the literature. This study however has identified a number of important relationships.

Males indicated greater interest in the activities in the Social and Sports groups more often than did females, while females indicated a significantly greater interest in the Learning activities. These differences may be reflecting the active and passive roles that are traditionally assigned to males and females respectively. Single people indicated the Social and Sports activities more often, whilst married people preferred Solitary and Learning activities. These preferences could well be explained by the amount of discretionary time available to each of these groups. Another interpretation of this result is that

married people are more likely to already exist in a social setting, whereas single people may have to seek this out.

Games, Social and Sports activities were generally indicated more often by the younger age groups of 21-30, 31-40 and 41-50 years. Solitary and learning activities were preferred by those people in the 51-60 age range.

Reading across the breakdown table led to the emergence of profiles of demographic variables associated with the leisure activity groupings, for example, singles, males and the younger age categories indicated the Social activities significantly more often than the other groups. This particular pattern of singles, males and younger ages, is also associated with Sports. Marrieds, females and the 51-60 age group indicated the Learning activities more frequently.

Education/qualification levels were significantly differentiated by the various groupings, but few clear interpretable patterns were apparent. Similarly, the patterns relating to occupational groups are open to various interpretations, with the possible exception of professional people preferring Learning activities.

The leisure activities were clearly linked to the occupational satisfaction variable. Those people not satisfied with their occupations preferred Social, Games and Sports activities. Satisfied people indicated activities in the Solitary and Learning groups. The former three groups of activities could possibly be seen to have diversionary or 'compensatory' functions.

The majority of relationships between the respondents



favourite activity, as expressed by these groupings, and the three coding systems appear to be as one might expect. However, each group often relates to more than one of the categories in each coding system and the Solitary and Learning groups are associated with exactly the same categories in all three coding systems. The relative lack of clear patterns across what is basically four different coding systems indicates the difficulties that arise when comparing results across studies.

However, the three coding approaches utilized here, whilst all attempting to describe the same dimensions, do not purport to be validated classification systems. It is difficult to comment on the value or otherwise of these approaches due to their still undefined nature. The coding of the reported activities into the categories of these systems was also carried out by only one person, (the author), relatively unfamiliar with the 'definition' of each of the categories. A more experienced panel of judges may have obtained a different mix of the activities.

The crosstabulations of reasons for participating in leisure in general with other variables also produced a high number of significant and interesting results.

Males indicated 'Competition' as being more important in their leisure activities, whilst females indicated 'Getting to know new people', 'Cooperating with others' and 'Feeling positive personal development' as important reasons for their leisure in general. Again, these results would appear to be reflecting sex roles. However, these differences do suggest that sex is an important discriminating variable on respondents' motivations for leisure. 'To help me enjoy family life' was rated as important

by 31-40 year olds and by people over 50, possibly reflecting the typical age of most parents and grandparents respectively. The importance of 'Challenge and/or excitement' decreases over age and 'To be involved in competition', whilst not rated as highly important by any category, becomes of decreasing importance with age, but the importance of 'Relaxing and taking it easy' also decreases with age. This latter result may be due to increased opportunities to relax with age, thus rendering it not so important to seek out further opportunities in specific leisure contexts. This is supported somewhat as the importance of 'Filling in time' generally increases with age. The importance of 'Thinking/puzzling' also increases with age.

The only reason for leisure that is significantly differentiated by education/qualifications is 'Being in a position where I can influence the lives and well-being of others, which increases in importance the higher the education level. This possibly reflects the respondent's probable position held in a hierarchy based on qualifications. Married people, obviously enough, find 'Enjoying family life' more important than single people. They also rate 'Thinking/puzzling things out' more highly. Single people indicated a greater preference for 'Challenge and/or excitement'. These latter two results may reflect the different responsibilities impinging on single and married people. However, some profiles can again be discerned across the tables. Singles indicate 'Challenge/ excitement' as more important, but this decreases with age. Males find 'Competition' more important than females, but the importance of this reason too decreases with age. 'Thinking/puzzling' is rated

as important by married people and also increases in importance with age. Thus these results may be due more to the average age of married and single people.

The only results that are associated with occupational satisfaction are the reasons that people dissatisfied with their occupations rate as not important. These were 'Cooperating with others', 'Help me to enjoy family life' and 'Being in a position where I can influence the lives and well-being of others'. This suggests that dissatisfaction at work carries over to other life-spheres. In addition, the common factor that people dissatisfied with their job rate as unimportant, appears to be enjoyment of social relationships.

The crosstabulation with the three coding systems identified three reasons which differentiated the categories. These reasons, 'Challenge/ excitement', 'Competition', and 'For health reasons/to keep fit' were regarded as important by people in the outdoor (Retirement quiz), and small-group/ individual categories, and as not important by those respondents in Holland's Artistic, or Investigative categories.

The correlation between respondent's occupation and favourite leisure activity presented no clear patterns, with the exception of people in Realistic occupations also favouring Realistic leisure activities. This gives some weight to the contention that people do not engage in the same type of activities in their free time, as they perform at work. Whether these results suggest complementary leisure time activities is less clear. A more detailed investigation is called for.

The second crosstabulation between respondents' first and second leisure activities suggest that leisure activity packages do exist. Again, people engaging in Realistic activities for their first activity also prefer Realistic activities for their second favoured activity. However, people in the other categories for their favourite activity display a wide range of interests in their next favoured leisure activity.

The correlation tables illustrating the relationship between respondents' occupation and favourite leisure activity, and between their first and second preferred activities reflect how an instrument applicable to two spheres can be utilized. The Holland categories have only recently been applied in the leisure field and have not, as yet, been validated. Whilst the Holland categories are reasonably in line with the groupings and factors from the main analysis; it can not be said, on the basis of this study, to be mirroring the leisure groupings that were found. However, it has enabled the relationship between two distinct life-spheres to be examined using an instrument that may prove to be meaningful to both.

## 5.2 Limitations of the Study.

Some major influences that are almost certainly operating, but have not been referred to are: 'Whole life' influences stemming from the respondents social environment or from other important life spheres which may be instrumental in determining the activities engaged in and even the reasons why they are engaged in. The assumption has also been made that the basic physiological needs have been met. However, these may well be

motivating part of the respondents behaviour. Even where they are not the primary motivating force, they could be exerting considerable influence. Finally the differences between respondents expressed attitudes and their actual behaviour is unknown. It is also unclear how people reporting no leisure activities would affect the results, but it is known that the sample was biased against people without telephones and those who had moved since early in 1983 when the census was being compiled.

Due to quite rigorous selection criteria, a number of the leisure activities were dropped from the final analysis. For example, Gambling- horse racing was not used as less than 20% of the sample indicated it as an activity of interest. (Thirty people, or 12% chose it). However this activity may satisfy needs which are not met by any other leisure pursuit. These excluded activities may only constitute a small part of most people's leisure repertoire, but it is exactly the people for whom this is a major activity that we need to contact.

The length of the questionnaire may have 'put people off' or made them rush through it. The format may have also been too difficult for all people to follow.

Coding of the data has meant a loss of flexibility in some cases. For example, reading and listening to music is classified under Holland coding as belonging to the Investigative category. However both reading and listening to music may be carried out for escapism or for learning.

The analysis also unfortunately loses sight of the minor fluctuations and isolates the one major pattern. These less dominant patterns are equally important for those people that

constitute a separate group.

An inevitable, but possibly significant factor is the imposing of the researchers structure on the study through the choice of design, items used, analysis and assigned labels.

### 5.3 Recommendations

Given the exploratory nature of this study, and indications that the sample was not representative, the replication of the procedure used here would be very interesting.

To include more activities in the analysis either more people would have to be included in the sample, or less rigorous criteria could be applied in choosing the leisure activities. The list of reasons that was used is central to the outcome. This needs to be tested for validity and reliability.

Of more fundamental importance, it is recommended that the analysis focus on the individual to identify if there are groups of people whom carry out activities for the same reasons. There is a suggestion that this is the case on the basis of the three top reasons for respondents favourite activity, which were quite distinctive. The classification of individuals would result in superior information than classification of activities.

Further investigation of the utility of cross-sphere instruments such as the Holland codes is warranted, and would appear to be a potentially rich field of research.

Finally, it is suggested that a field test of these results would be a direct way in which to gauge their usefulness.

#### 5.4 Summary

In general the results give the impression of half the pieces in a jig-saw puzzle. The frequencies, the correlates of the leisure activity groups and the correlates of the reasons portray much information, but the causes of these effects are still unclear.

The major advance would be the use of profiles of reasons to group the activities, especially as the results of that analysis replicate a number of factors from past studies. Still, the limitations discussed restrict the generalisability of these results. It is suggested that this information can still be tested in the field, and that future research lay even greater emphasis on individual differences.

## CHAPTER SIX

### CONCLUSION

This study was initiated in an attempt to provide information that could be used in leisure guidance settings. Specifically, the aim was to identify groups of substitutable leisure activities which could be presented to a person who only knew the type of activities that they were interested in, or the reasons why they would like to do something.

To achieve this it was desired to group activities on the basis of the reasons why participants engaged in them. That is, a basis that is meaningful from an individuals viewpoint, that is simple to communicate and to respond to, and is directed at the mechanisms of choice, i.e. why this activity is enjoyable.

The successful resolution of this problem would achieve a number of goals. First, it would add to the research on the identification and stable classification of the motivational forces underlying leisure behaviour patterns. It would provide practical information that would be useful for leisure guidance, and it would also obviate some of the pervasive problems with research in this field.

Utilizing raw data, sorted by a quantitatively powerful computer programme, a classification of leisure activities based on the reasons why they were pursued was able to be achieved. Furthermore, these groupings replicate a number of dimensions which had been reported in the leisure classification literature. They also correlated highly with the factors derived from a more



conventional factor analytic treatment of the same data.

Frequency counts of the patterns of reasons associated with each of the activities identified a predominant profile, that is, the set of reasons that was indicated most frequently by those people participating and interested in that leisure activity. Five groups of activities were derived, each of the activities ~~having at least two reasons in common with the other activities in it's group.~~

The use of the combination frequency analysis appears to be a viable method of identifying major profiles. This is seen as particularly appropriate in an investigation of the motivations associated with leisure activities.

A major limitation with this approach is that it only produces major patterns, i. e. the norm. Whilst this may be useful in general guidance situations, it is recommended that future research attempts to aggregate individuals on the basis of their responses rather than aggregate the responses of the individuals.

Research appears to be equivocal about the impact of current trends towards increasing amounts of free time. However, it is considered that whatever means is used, encouraging and aiding people in finding the set of activities which is most suited to their needs, is worthwhile.

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With growing numbers of unemployed, more people reaching retirement age and a general increase in the number of hours we have free (especially with increasing technology), there is a need for a Leisure Guidance Form.

There are two parts to this instrument. The first asks questions about your leisure activities and the second is a vocational guidance form. Together they should take approximately 40 minutes to complete. All answers are anonymous, confidential and much appreciated. Thank you for your time. I'm sure you will find from your answers in filling out this questionnaire information that will be both interesting and useful to you.

FOR EXAMPLE: -

☒

and leaving blank	the ones that don't apply.
-------------------	----------------------------

	1	2	3	4	5
Relieves frustration					
Gives me privacy/a chance to be alone					
Gives me to relax and take it easy					
Allows opportunity for feeling positive					
Gives me to organize my own decisions					
Allows personal development					
Gives opportunity for making my own decisions					
Lets me organize my own decisions					
Does this activity interest you?					

2.

Fill out those leisure activities in which you are interested (first column in the example on page 1). Don't worry if you have not done it in the past; say why you would like to do it. If you are not interested, pass on to the next activity.

Don't worry about how others might answer as what is important is why you do the activities.

\* \* \* \* \*

### FAVOURITE ACTIVITIES

When you are free to do exactly as you please, what do you and/or would you do?

Fill in the spaces below with your two favourite Leisure Activities (whether you are doing them now or would like to do them in the future), and why you enjoy them. Don't worry if they occur later on.

- 1) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- 2) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\* \* \* \* \*

3.

Please rate the following from 1 to 5. Rate them according to how important they are to you as reasons for your leisure activities in GENERAL. Choose from the following ...

NOT IMPORTANT  
1

2

NEUTRAL  
3

4

VERY IMPORTANT  
5

... then place your rating at the end of each statement.

- 1) Organizing my own activities and being responsible for making my own decisions. \_\_\_\_\_
- 2) Feeling positive personal development and growth. \_\_\_\_\_
- 3) Relaxing and taking it easy. \_\_\_\_\_
- 4) To give me privacy/ a chance to be alone. \_\_\_\_\_
- 5) To relieve frustration. \_\_\_\_\_
- 6) To help me enjoy family life. \_\_\_\_\_
- 7) A change from daily routine. \_\_\_\_\_
- 8) To fill in the time. \_\_\_\_\_
- 9) Getting to know new people/making close friendships. \_\_\_\_\_
- 10) Cooperating with others \_\_\_\_\_
- 11) Challenge and/or excitement. \_\_\_\_\_
- 12) To be involved in competition. \_\_\_\_\_
- 13) Thinking/puzzling things out. \_\_\_\_\_
- 14) Using and/or developing a number of different skills and abilities. \_\_\_\_\_
- 15) To let me know what's going on/help me increase my knowledge and skills. \_\_\_\_\_
- 16) For health reasons/to keep fit. \_\_\_\_\_
- 17) Gaining the respect or admiration of others. \_\_\_\_\_
- 18) Seeing the results of my efforts/having a feeling of achievement. \_\_\_\_\_
- 19) Organizing teams, groups or organizations. \_\_\_\_\_
- 20) Being in a position where I can influence the lives and well-being of others. \_\_\_\_\_
21. Others ... \_\_\_\_\_



If you are not interested in a leisure activity, move on to a next one. Fill out those activities in which you are interested. Don't worry if you haven't done it in the past, tick why you would like to do it.

Gives opportunity  
 Personal development  
 Lets me organize my  
 responsible for making  
 HAVE YOU DONE THIS ACTIVITY?  
 DOES THIS ACTIVITY INTEREST YOU?

ATTORNEY GENERAL  
DEPARTMENT OF JUSTICE  
WASHINGTON, D.C. 20530

Gives me the opportunity to  
 volunteer and help my community

Relax  
to relax  
for fee  
activities  
a de

believes in privacy and tax-cutting positions.

helps me  
frustrate  
chance  
it e

Allows to enjoy  
to be

Fills  
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Help friends in the  
from  
life

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involves  
on

For physical  
please know  
and/or  
puzzling

others health fully fit what's knowledge developed ability

Leaves gives me reasons for going on and on.

...organ  
...me a  
...gain  
...helps  
...helps  
...kin

involves the re-organizing of the response.

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10

5.

12) Following politics in the newspapers or on TV and radio

13) Collecting/cataloguing  
coins, stamps, photo  
albums or scrap books.

14) Playing football, netball, hockey, cricket, and other team sports

15) Playing chess, draughts, bridge, scrabble or other games of skill

16) Doing handicrafts such as pottery, weaving, macrame, jewellery making, etc.

17) Attending sports events,  
pop concerts, films, etc.  
with a group of friends

18) Doing small jobs such as gardening or housework for a fee

19) Keeping detailed accounts  
or a careful diary

20) Making things like model aircraft, dresses, etc. using patterns or plans

21) Watching/listening to 'in-depth' reports or documentaries on radio or TV.

22) Visiting art galleries, exhibitions, plays or concerts



In looking back over the questionnaire you may be able to spot some patterns in your answers. For example, one person might do a lot of the activities for 'Challenge' and because it involves 'Competition', whereas another person may have mostly ticked 'Challenge' and 'Feeling personal development' (even for the same activities!). Whatever your major reasons may be, you can check to see if they will be involved when choosing future leisure activities.

Also, by looking at the leisure activities that you were interested in you might find similarities between them that pinpoints the type of leisure activities that you would enjoy trying out. - HAVE A GO !

Female

☐

Male

☐

Married

☐

Single

☐

(Responsible for looking  
after a family)

AGE (circle)

15-20

21-30

31-40

41-50

51-60

61-70

&gt;71

EDUCATION/QUALIFICATIONS (circle)

High School

School Cert.

U.E.

Trade Cert.

Tertiary

OCCUPATION

---

How SATISFIED are you with your occupation?

1  
Not  
Satisfied

2

3

Neutral

4

5

Very  
Satisfied

Any comments you would like to make:



Appendix B.

Comments Made By Respondents:

Responses To An Open-Ended Question.

ENJOY FAMILY ACTIVITIES ALSO OWN PURSUITS EQ. TENNIS. TEMP. RELIEVING WORK ALLOWS VARIETY.

INVOLVED IN YOUTH ACTIVITIES, MEET PEOPLE IN BUSINESS. INVOLVED IN TEAM AND FAMILY GAMES.

ONLY GET BACK WHAT YOU GIVE OUT AND BEING HAPPY WITHIN YOURSELF AND (WITH) WHAT YOU HAVE IS VERY SATISFYING.

WISH I STILL HAD MY HUSBAND THEN I WOULD STILL BE HAPPY.

BEING UNABLE TO DRIVE RESTRICTS MY LEISURE ACTIVITIES.

IF I HAD RETIRED AT 60 I FEEL I WOULD HAVE BEEN A BORED AND FRUSTRATED PERSON WHO COULD BE DIFFICULT TO LIVE WITH. (R. >65)

NO OUTLET FOR THE ELDERLY EXCEPT RAFFIA ,BASKET-WORK AND GOD-HELP-US SING ALONGS...

I LIVE A VERY BUSY LIFE... SOMETHING UNEXPECTED ALWAYS CROPS UP AND I FIND IT VERY HARD TO SAY NO AS THERE IS SO MUCH VOLUNTARY WORK TO BE DONE AND A LOT OF SICKNESS AROUND ME.

I HAVE RELATED MY ANSWERS TO 60-70, BECAUSE AT 78 I AM PHYSICALLY INCAPABLE OF MANY ACTIVITIES ENJOYED UP TO 70.

THERE IS NO SUBSTITUTE FOR WORK AND OCCUPATION AND CONTENTMENT WITH LIFE.

HAVE BEEN RETIRED FOR 12 YEARS, WRITTEN A BIOGRAPHY AND AM AT PRESENT TAPING ORAL HISTORIES OF ELDERLY NURSES.

A NUMBER OF ACTIVITIES AVAILABLE TODAY NOT AVAILABLE IN MY YOUNGER DAYS.

LEISURE TO ME IS HARD TO GET AFTER TAKING CARE OF HOME/FAMILY COMMITMENTS. ONLY THOSE ACTIVITIES THAT DO NOT REQUIRE REGULAR COMMITMENT CAN BE UNDERTAKEN WITHOUT BEING SELFISH.

I THINK INVESTIGATIONS OF LEISURE ACTIVITIES ARE VERY IMPORTANT NOW AND AM PLEASED TO SEE THIS SURVEY.

HAVING BROUGHT UP 4 CHILDREN, NOW HAPPILY MARRIED, LIFE IS WONDERFUL-TO BE ABLE TO TAKE AN INTEREST IN GOLF , YOGA AND DANCING WE BOTH ENJOY TOGETHER. LIFE BEGINS AT 60.

PRAISE THE LORD FOR HE IS THE SOURCE OF MY RELAXATION.

BEING INVOLVED WITH A CHILD AND HUSBAND(ODD WORK HOURS) MY LEISURE TIME IS OFTEN COMPULSORY SUCH AS EVENINGS- WHERE I WATCH TV OR READ- I PERSONALLY WOULD RATHER BE DOING SOMETHING ELSE BUT AT PRESENT FINANCIAL COMMITMENTS DO PLAY A MAJOR PART IN ALL OUR LIVES.

I HAVE NEVER REALLY CONSIDERED WHY I DO SOMETHING AS THIS SUGGESTS. I DO THINGS BECAUSE I ENJOY THEM, AND THEY ARE A CHANGE FROM THE DEMANDS OF MY JOB.

WHEN I LIVED IN THE COUNTRY 1 YEAR AGO I DID MOST OF THESE ACTIVITIES BUT LIVING IN THE CITY YOU JUST DON'T HAVE THE TIME.

NOW RETIRED. ADVISE ALL RETIRED TO LEAD AN ACTIVE LIFE.

CHURCH ACTIVITIES SHOULD HAVE BEEN INCLUDED. MEET PEOPLE AT DINNERS ,FAIRS, XMAS PAGEANTS, MEETINGS, YOUTH GROUP CAMPS, BOATING ACT.S BBQ'S,BRIDGE CLUB..., AND ABOVE ALL FRIENDSHIP. GARDENING SHOULD BE A SEPARATE LEISURE ACTIVITY.

RELAXING FOR ME IS NOT NECESSARILY TAKING IT EASY. BECAUSE OF THE INTENSE DEMANDS OF MY JOB IT IS CRITICAL I UNDERTAKE LA'S TO RELAX MY MIND.

I'M AN AVID CROSSWORD FANATIC.

AT THIS PRESENT TIME I NEED MORE ENERGY TO PURSUE THE MANY THINGS I STILL WOULD LIKE TO DO.

THE MOST IMPORTANT THING ABOUT LEISURE IS TO DO WHAT YOU WANT AS FAR AS POSSIBLE. ALSO FOR ME I NEED THE RELAXING LEISURE AND THE COMPETITION LEISURE TO COMPLEMENT EACH OTHER.

BEING ABLE TO DO WHAT YOU LIKE , WHEN YOU LIKE. TAKING ALL THE TIME YOU NEED TO DO JOBS, NOT RUSH THEM. LEAVING INSIDE JOBS IF POSSIBLE FOR WET OR WINTER DAYS.

WOULD LIKE THE STIMULUS OF A PART TIME JOB AND ALSO THE STATUS . FEEL THE HOUSEWIFE IS OFTEN DOWNGRADED BY THE COMMUNITY.

I AM FIRMLY CONVINCED THAT ANYBODY WANTING TO WORK AFTER THE AGE OF 60 DOES NOT REALIZE THE MANY OPPORTUNITIES THAT EXIST FOR A NEW LIFE. .

YES I'M A SPUC SUPPORTER. I WOULD COMMENT ON YOUR QUIZ THAT I WOULD LIKE YOUNG PEOPLE TO BE REMINDED THAT ACADEMIC QUALIFICATIONS ARE REALLY NOT AS IMPORTANT AS CHARACTER FORMING-HONESTY, JUSTICE, RELIABILITY, PLAYING THE PART IN CORRECT PERSPECTIVE-NOT TO BE A PART IN ANY INDECENT INCIDENTS THAT BLUR THEIR GOOD NAMES "GREATER THAN RICHES OR ACCOMPLISHMENTS IS A GOOD HONORABLE NAME"AS I'M NOT A MEMBER OF YOUR STAFF, I THANK YOU FOR THE INTEREST THAT YOU HAVE SHOWN AND EXCUSE ME FOR ANY ANXIETY I MAY HAVE CAUSED ANY OF YOU AND I PRAY GOD WILL BLESS ALL SCHOLARS THAT WISDOM WILL BE A TRUE FRIEND.

I LIKE TO HELP OTHER PEOPLE VERY MUCH.

SAD WE DON'T HAVE MORE ,BUT PROBABLY WOULDN'T ENJOY IT IF WE HAD ANY AMOUNT ANYWAY.

AS A PRINCIPAL OF A LEISURE CENTRE I AM SUPRISED AT THE NUMBER OF PEOPLE ANSWERING A SIMILAR QUES. EXPRESS A PREFERENCE FOR SQUASH AS A CONVENIENT ALL-WEATHER ACTIVITY USING A MINIMUM OF TIME FOR THOSE PEOPLE WITH A BUSY LIFESTYLE.

IT IS HARD TO DRAW ANY DISTINCT LINE BETWEEN LEISURE AND WORK.

I ENJOYED DOING THIS QUES. I FIND THAT MY JOB PROVIDES THE CHALLENGES AND PERSONAL GROWTH ASPECTS ,AND THEREFORE LEISURE TIME IS USED IN LESS COMPETITIVE ACTIVITIES.

WITH 2 PRE-SCHOOL CHILDREN TO KEEP ME BUSY. MY PERSONAL LEISURE TIME IS SOMEWHAT RESTRICTED (AT THIS TIME) I DO GIVE ,HOWEVER, MORE AND MORE THOUGHT TO POSSIBLE FUTURE ACTIVITIES I CAN PURSUE. I DO MANAGE TO DABBLE IN A FEW ACTIVITIES NOW WHICH DO HELP TO BRING PERSPECTIVE TO THE SITUATION.

I HOPE THIS WILL BENEFIT PEOPLE IN THE FUTURE.

44 YRS IN PRESENT EMPLOYMENT,34 YRS IN VOLUNTEER FIRE BRIGADE. 22 YRS IN SUMNER LIFE BOAT INSTITUTION. WHEN RETIRED(MAR 1984) WILL ENJOY "POTTERING AROUND" GARDEN AND SOME LEISURE.

FEEL VERY FORTUNATE IN HAVING SUCCEEDED IN COMBINING MY HOBBIES/INTERESTS WITH EARNING AN INCOME.

WHERE IS DANCING? IT IS POSSIBLE THAT MANY YOUNG PERSONS ARE INFLUENCED BASICALLY BY WHAT THEIR PARENTS DO AND 'BRING THEM UP TO' THAN WHAT THEY WOULD OTHERWISE DO.

LIFE CHANGES. MY LEISURE IS NOW VASTLY DIFFERENT TO WHEN I WAS FULLY INVOLVED IN REARING A FAMILY AND INVOLVED IN THEIR ACTIVITIES-SPORTS, GUIDES ,SCOUTS ETC.

I AM QUITE FASCINATED HOW YOU CAN MAKE ANY NORMAL ACTIVITY SO COMPLICATED WITH FANTASTIC REASONS FOR DOING ANYTHING.

AFTER WORKING FOR 22 YEARS I THOROUGHLY ENJOY MY RETIREMENT. THE DAYS ARE TOO SHORT FOR ME . I ALSO LOVE GARDENING AND LOOKING AFTER MY POT PLANTS. IN WINTER WE PLAY GOLF AND IN SUMMER BOATS ,FISH AND TRAVEL ALL OVER N.Z. ENJOYING THIS BEAUTIFUL COUNTRY. I READ AT LEAST ONE BOOK A WEEK AND PLAY A MUSICAL INSTRUMENT ABOUT 1-2 HOURS A DAY. I ALSO LIKE COOKING AND PRESERVING.

I FIND THAT I SPEND A FAIR AMOUNT OF TIME ON WORK AT HOME-WALLPAPERING, GARDENING AND DON'T HAVE THE TIME OR INCLINATION TO TRY OUT NEW LEISURE ACTIVITIES.

THINK PERHAPS YOUR QUESTIONS ARE LOADED FOR YOUNGER AGE BRACKET

AND FOR PERHAPS SOMEONE WITH A MORE COMPETITIVE SPIRIT THAN MINE.

WORK AND SOCIAL ACTIVITIES ARE LINKED BY THE PEOPLE INVOLVED.

THANK YOU FOR THE OPPORTUNITY OF FILLING THIS QUESTIONNAIRE. IT HAS FURTHERED MY SELF-AWARENESS OF WHY I PARTICIPATE IN LA'S. I BELIEVE EDUCATION SHOULD PREPARE STUDENTS TO FACE THE UNUSUAL, THE DISTASTEFUL AND THE FUTURE WHERE LEISURE MAY BE A PREDOMINANT PART OF OUR LIVES.

QUESTIONNAIRE IS TOO NON-SPECIFIC. MY LA'S DIVIDED BETWEEN THOSE PERSONALLY REQUIRED TO GET AWAY FROM THE HASSLE' AND THOSE REQUIRED FOR PROPER FAMILY INVOLVEMENT. WHILST I MAY FISH ALONE ON OCCASIONS THERE ARE OTHERS DURING WHICH CHILDREN MAY BE Y BE ALONG TO LEARN THE SKILLS AND HOPEFULLY THE ADVANTAGES. YOU ALSO IGNORE THE ECONOMIC CONSTRAINTS ON LEISURE.

I AM A WIDOW WITH A MARRIED FAMILY.

YOU HAVEN'T MENTIONED ANY INVOLVEMENT WITH CHURCH ACTIVITIES.

WOULD LIKE TO SEE THE YOUNGER GENERATION INVOLVED IN MORE PROFITABLE LEISURE TIME ACTIVITIES.

THE QUESTIONNAIRE DID NOT REALLY CATER FOR 'POSITIVE ENJOYMENT' OF SAY A CONCERT OR MUSIC - I.E. A MORE POSITIVE EXPERIENCE THAN FILLING IN THE TIME(8), RELIEVING FRUSTRATION(6), OR RELAXING AND TAKING IT EASY(3). ALSO HOBBIES FROM THE PAST, EVEN CHILDHOOD, SEEM RATHER IRRELEVANT WHEN ANSWERING FROM A PERSPECTIVE OF 51-60.

I FIND THAT ONE IS NEVER TOO OLD TO LEARN.

YOU HAVE NOT TAKEN INTO ACCOUNT THE VAST NUMBER OF PEOPLE WHO ARE USING CONTINUING EDUCATION AS A LEISURE ACTIVITY.

IT'S A BIT LIKE ASKING MUM WHY SHE LOVES HER KIDS AND GIVE A DOZEN OR MORE REASONS. THE LAW OF SUPPLY AND DEMAND ARE OPERATING. ALREADY WE SEE INCREASED RECREATIONAL FACILITIES AND A RAPID GROWTH IN INVESTMENT IN SPORTING ACTIVITIES (SKIING, JOGGING ETC.) AND ALSO IN TOURISM AND INVESTMENT OF HOLIDAY RESORTS.

I HAD A VERY SATISFYING JOB UP TO THREE YEARS AGO, WHEN IT WAS FED INTO A COMPUTER FOR FODDER. I HAVE BEEN KEPT ON BY THE FIRM, BUT IT SEEMS TO ME ONLY AS A FILLING IN PERSON HELPING OUT HERE AND THERE. GENERALLY HELPING OUT IN A NUMBER OF JOBS. LONG TERM HOPES ARE OF EARLIER RETIREMENT AND DO SOMETHING MORE POSITIVE FOR MYSELF. (E.G. A SMALL BUSINESS OR SOMETHING.

EARLY EDUCATIONAL QUALIFICATIONS MAPPED OUT A CAREER - LIFE HAS TAUGHT ME THAT JOB SATISFACTION IS PARAMOUNT AND VIRTUALLY INSEPARABLE FROM LEISURE ACTIVITIES ATTITUDE. DUE TO THE PROSPECT OF REDUNDANCY AND UNEMPLOYMENT IN OUR SOCIETY, INTERESTS SHOULD ALSO BE DIVERSIFIED. UNFORTUNATELY, UNEMPLOYMENT, WHILST

GIVING THE TIME TO ENJOY LEISURE ACTIVITIES , TAKETH AWAY THE WHEREWITHAL I.E. MONEY. MONEY REPRESENTS ABILITY TO BUY INTO LEISURE.

SINCE BECOMING DISABLED IN 1977 I HAVE ADOPTED A VERY POSITIVE ATTITUDE TOWARDS VOCATION. PLUS ALWAYS LOOKING AND TRYING NEW RECREATIONAL ACTIVITIES. WAS ALWAYS A VERY COMPETITIVE PERSON AS ABLEBODIED REPRESENTATIVE CRICKETER AND HELD RECORDS FOR SWIMMING EVENTS. SINCE BECOMING DISABLED I HAVE REALIZED THERE IS MORE TO BE GAINED FOR ME AND MY WIFE ACADEMICALLY. STILL KEEN ON SPORT AND ENJOY THOSE I DO TAKE PART IN, BUT NOT SO COMPETITIVELY NOW.

I AM AN ENGINEERS PATTERN MAKER BY TRADE, BUT I HAVE ENJOYED THE CHALLENGE OF SELLING OVER RECENT YEARS. DURING MY YOUNGER YEARS, MY MAIN INTERESTS WERE COMPETING IN RUGBY AND MOTOR-CYCLE RACING.

AFTER 48 YEARS AT MY TRADE AND 6 YEARS IN ARMY AND P.O.W. CAMPS I FIND MYSELF ALMOST A COMPULSIVE WORKER AND I TEND TO COMBINE ALL MY LEISURE TIME WITH MY WORK. THIS LIFESTYLE KEEPS ME IN CLOSE CIRCLE OF ASSOCIATES AND GIVES ME GREAT OPPORTUNITIES TO ENJOY URBAN LIFE.

I DO NOT FEEL THAT RELAXING AND TAKING THINGS EASY ARE THE SAME. FOR INSTANCE I THINK THAT I RELAX WHEN I'M TIRED. I REGARD TAKING THINGS EASY MEANS BEING LAZY. GETTING TO KNOW PEOPLE DOES NOT ALWAYS MAKE CLOSE FRIENDSHIPS. THE THINGS I TAKE PART IN ALL TEND TO KEEP ONE FIT BUT I DON'T DO THEM FOR THAT REASON. PLEASED TO HAVE BEEN OF HELP.

I ENJOY (USUALLY) BEING A MOTHER, BUT WOULD LIKE MORE OPPORTUNITY AND TIME TO GAIN SOME SPECIFIC USEFUL SKILL. ALSO MORE LEISURE TIME. ALTHOUGH YOUR QUESTIONNAIRE COVERS A WIDE RANGE OF ACTIVITIES I FEEL IT LEAVES OUT SOME VERY IMPORTANT ONES: GARDENING, ANIMALS/PETS, RESTORATION, COOKING AND ART. EVEN THINGS LIKE MOTOR BIKE OR CAR 'TAMPERING' WHICH ARE SO IMPORTANT TO MANY TEENAGERS AND ADULTS, OR JUST SIMPLY WALKING OR SITTING WATCHING THE STREET FOR ELDERLY OR DISABLED COULD BE CLASSED AS LEISURE TO SO MANY PEOPLE.

WHILE BEING VERY SATISFIED WITH THE ROLE OF WIFE, MOTHER AND COMPANY, DIRECTOR I STILL FEEL THAT BEING THE NUCLEUS OF THE FAMILY ONE TENDS TO FEEL SELFISH IF ONE DEVOTES TOO MUCH TIME TO ANY INTEREST, EG. TENNIS ONCE A WEEK IS ACCEPTABLE, BUT TEN HOURS A WEEK TO STUDY IS NOT SEEN AS 'FAIR'. ONE MUST HAVE AN EXTREMELY TOLERANT HUSBAND TO PURSUE ANY INTEREST IN DEPTH AND IF HUSBAND IS EXTREMELY BUSY AS WELL IT IS IMPOSSIBLE , IF ONE IS DETERMINED THAT THE FAMILY AS A WHOLE IS EXTREMELY IMPORTANT.

Appendix C.

PASCAL PROGRAMME TO IDENTIFY  
MOST FREQUENTLY OCCURRING COMBINATIONS

```
PROGRAM PATRICK;
```

```
CONST
```

```
  RWHYSIZE  = 23;  
  RWHYPOWR  = 8388608;  
  LSACSIZE  = 33;
```

```
TYPE
```

```
  LSACARY=PACKED ARRAY[1..31] OF char;  
  hpelement = RECORD  
    perm: integer;  
    freqcy: shortint  
  END;  
  permfreq=ARRAY[1..7] of hpelement;
```

```
VAR
```

```
  inrec      : LSACARY;  
  inputfl    : TEXT;  
  i, j, k    : INTEGER;  
  BSARRAY    : ARRAY[1..300] OF INTEGER;  
  freq       : integer;  
  permlist   : ARRAY[1..6] OF permfreq;  
  newone     : hpelement;  
  bitcount   : shortint;  
  y, z       : shortint;  
  iii, jjj   : shortint;  
  sampsize   : shortint;  
  maxbs      : integer;  
  x          : integer;  
  total      : shortint;
```

```
function checkb(var a: integer): shortint; EXTERN;
```

```
function andeq(var a, b: integer): shortint; EXTERN;
```

```
{ 'PROCESS' IS A SORT PROGRAM USING A BINARY TREE (HEAP) METHOD. }  
[IT TESTS FOR THE 'TOP 7' AND ARRANGES THEM IN ORDER.]
```

```
Procedure process;
```

```
var kk : shortint;
```

```
Begin
```

```
  bitcount := bitcount - 4;  
  if permlist[bitcount][1].freqcy < freq then  
    begin  
      newone.perm := i;  
      newone.freqcy := freq;  
      y := 1; z := 2;  
      while z <= 7 do  
        begin  
          if permlist[bitcount][z].freqcy > permlist[bitcount][z+1].freqcy then  
            z := z + 1;
```

```

        if newone.freqcy >= permlist[bitcount][ly].freqcy then
            begin
                permlist[bitcount][ly] := permlist[bitcount][lz];
                y := z;
                z := 2*y;
            end
        else z := 8;
        end;
        permlist[bitcount][ly] := newone;
    {   writeln('Permlist ', bitcount, ' updated to');
        for kk := 1 to 7 do
            writeln('Element', kk:3, ' *** ', 'COMBINATION (decimal)--',
                permlist[bitcount][kk].perm:9,
                permlist[bitcount][kk].freqcy:3, ' --FREQ'); }
        end;
    end;

{PRINTS THE RESULTS AT THE END OF PROCESSING EACH LEISURE ACTIVITY.}
Procedure finish;
var ii, kk, jj : shortint; n : integer;
begin
    for jj := 1 to 4 do
        begin
            writeln;
            writeln('HEAP of HIGHEST FREQUENCY ', jj+4:3, ' tick combinations');
            for kk := 1 to 7 do
                begin
                    write(kk:3, ' *** ');
                    n := permlist[jj][kk].perm;
                    for ii := 31 downto 1 do
                        begin
                            inrec[ii] := chr((n - ((n div 2) * 2)) + ord('0'));
                            n := n div 2;
                            if inrec[ii] = '1' then
                                write(((ii - 32) * (-1)):3, ', ');
                            end;
                        {   write(inrec); REM. writes out 0's and 1's}
                    }
                    writeln(' ! ',
                        ((permlist[jj][kk].freqcy * 100) DIV sampsize):5, ' %',
                        ((permlist[jj][kk].freqcy * 100) DIV total):5, ' % ',
                        permlist[jj][kk].freqcy:3,
                        ' --- percent of SAMPLE/TOTAL, raw FREQ');
                    end;
                end;
            end;
        writeln('~~~~~');
    end;

{***** MAIN PROGRAM *****)

{A LOOP FOR LEISURE ACTIVITY 1 TO LEISURE ACTIVITY X}
BEGIN
FOR III := 0 TO      32  DO

    (INITIALIZATION)

```

```

BEGIN
for i:=1 to 31 do
    inrec[i]:= ' ';
for i := 1 to 6 do
    for j := 1 to 7 do
        BEGIN
            permlist[i][j].freqcy := 0;
            permlist[i][j].perm := 0;
        END;
writeln('** PROCESSING LEISURE ACTIVITY ',iii+1:3);
{READS INPUT FILE AND STORES DATA}
reset(inputfl, 'DATATOT');
for jjj := 1 to iii do
    readln(inputfl);
sampsiz := 0;
total := 0;
maxbs := 0;
WHILE NOT EOF(INPUTFL) DO
    BEGIN
        total :=total+1;
        inrec[1]:=inputfl@;
        get(inputfl);
        inrec[2]:=inputfl@;
        get(inputfl);
        if (inrec[1] = '1') and (inrec[2] = '1') then
            begin
                sampsiz := sampsiz + 1;
                bsarray[sampsiz] := 0;
                x := 1;
                FOR k:=1 to 20 do

                    {READS 20 RELEVANT CHARACTERS}
                    BEGIN
                        inrec[1]:=inputfl@;
                        get(inputfl);
                        write(inrec[1]);
                        if inrec[1] = '1' then
                            bsarray[sampsiz] := bsarray[sampsiz] + x;
                            x := x*2;
                        END;

                    {RECORDS MAXIMUM VALUE COMBINATION}
                    if bsarray[sampsiz] > maxbs then
                        maxbs := bsarray[sampsiz];
                    end;
                for k := 1 to 35 do
                    if not eof(inputfl) then readln(inputfl);
                END;
            end;
writeln('Sample of ',sampsiz:3, ' Proportion of Total is ',
        ((sampsiz * 100) DIV total):3, '%');
{***** PERMUTATIONS *****)

{CHECKS COMBINATIONS}
FOR i:=1 to maxbs do
    BEGIN

```



```

      k:=i;
      bitcount := checkb(k);
{      if bitcount = 1 then writeln(k); }
      if (bitcount > 4) and (bitcount < 9) then
        begin
          freq := 0;
          for j := 1 to sampsize do
            freq := freq + ANDEQ(bsarray[j],k);
          if freq > 1 then process;
          end;
        END;
      finish
    end;
  END.

```

### Appendix D

#### Description of the Process To Determine the Significance of the Predominant Profile.

The probability with which each combination occurred may be compared with a figure which describes the probability of any one combination occurring by chance.

'N' = the number of people in the sample.

'k' = the average number of ticks made by the middle 90% of the people interested in each leisure activity.

'n' = the number of relevant reasons for each activity, i.e., the reasons that were chosen by at least 5% of the sample.

$A_i$  = Probability ( any one combination of reasons occurring)

$$P(A_i) = 1 / C_n \text{ to } C_k$$

(and where  $j$  = individual reasons up to groups of eight reasons.)

$$P(A_j) = C_{n-j} \text{ to } C_{k-j} / C_n \text{ to } C_k$$

Using the example quoted in the results section, leisure activity number 21: 'watching/listening to 'in-depth' reports on the media',  $N = 137$ ,  $k = 2$  and  $n = 6$ . Thus the probability of any one reason occurring is approximately  $2/6$  or 33.3%. For groups of two reasons the formula becomes:

$$\begin{aligned} & k/n \times (k-1/n-1) \\ &= 2/6 \times 1/5 \\ &= \underline{6.7\%} \end{aligned}$$

To determine the upper confidence limits of these figures we use the formula:

$$P(A_i) + Z\text{-score} \times \text{Standard error of } P(A_i)$$

In the first instance of the example this becomes:

$$P(A_i) = .333$$

To keep alpha constant at 0.05 we need to make a correction:

$$\begin{aligned} \alpha &= \alpha / n && \text{(n is the number of ways of randomly} \\ &= 0.05 / 6 && \text{choosing any one from 'n' reasons)} \\ &= 0.00833 \end{aligned}$$

This corresponds to a Z-Score of 2.4.

$$\begin{aligned} \text{Standard error} &= \text{Square Root of } (P(A_i) \times (1-P(A_i))) / N \\ &= \text{Square Root of } 0.333 \times 0.667 / 137 \\ &= 0.0403 \end{aligned}$$

Thus the upper confidence limit equals:

$$\begin{aligned} &= P(A_i) + Z\text{-score} \times \text{Standard error of } P(A_i) \\ &= .333 + 2.4 \times 0.0403 \\ &= 0.435 \end{aligned}$$

In the second instance of the example:

$$P(A_i) = .067$$

To keep alpha constant at 0.05 we need to make a correction:

$$\alpha = \alpha / n(n-1)/2 \quad (n(n-1) \text{ is the number of ways of randomly}$$

$$\begin{aligned}
 &= 0.05 / (6 \times 5) / 2 \quad \text{choosing any two from 'n' reasons)} \\
 &= 0.00083
 \end{aligned}$$

This corresponds to a Z-Score of 3.1

$$\begin{aligned}
 \text{Standard error} &= \text{Square Root of } (P(A_i) \times (1-P(A_i))) / N \\
 &= \text{Square Root of } 0.067 \times 0.933 / 137 \\
 &= 0.0214
 \end{aligned}$$

Thus the upper confidence limit equals:

$$\begin{aligned}
 &= P(A_i) + \text{Z-score} \times \text{Standard error of } P(A_i) \\
 &= .067 + 3.1 \times 0.0214 \\
 &= 0.1330
 \end{aligned}$$

The predominant group of reasons associated with 'watching/listening to 'in-depth' reports in the media' occurs in the groups of two reasons ( $k = 2$ ). The most frequently occurring combination is of reasons 13 and 15, 'Thinking/puzzling things out' and 'To let me know what's going on/ help me increase my knowledge and skills' respectively. These two were chosen by 30% of the sample which exceeds the upper confidence limit of 13.3%. Four of the groups of two reasons can be seen to be exceeding this figure suggesting they are occurring at a higher rate than could be expected by chance.

Appendix E.

'Reasons' Grouped on the Basis  
of Common Associated Reasons.

This table groups the reasons for engaging in activities on the basis of the predominant pattern of leisure activities that was associated with each reason. Those with similar predominant patterns are grouped together.

TABLE.

Reasons for Engaging in Leisure Activities grouped on  
the basis of Predominant Profiles of Associated Activities.

RWCOMB 1 (MISC.)				
Common Activity a)8. Bushwalking				
1. Organize own activities	2	8	28	
7. Change from routine	1	8	28	
16. Health reasons/keep fit	1			
RWCOMB 2 (CREATIVITY)				
Common Activity a)2. Repairing or mending things				
13. Thinking/Puzzling	2	15		
14. Use + develop skills	2	20		
18. See results of my efforts	2			
RWCOMB 3 (RELAXING)				
Common Activity a)27. Reading/Listening to music				
2. Personal development	22	27		
3. Relax	8	23	26	27
4. Privacy	8	27		
5. Relieves frustration	8	27		
RWCOMB 4 (SOCIAL INTERACTION)				

Common Activity a)14. Team sports		
9. Get to know new people	14	23
RWCOMB 5 (CHALLENGE))		
11. Challenging/exciting	8	29
RWCOMB 6 (LEARNING)		
15. Know whats going on	12	21

LIST OF LEISURE ACTIVITIES

- |                               |                                     |
|-------------------------------|-------------------------------------|
| 1 SWIMMING, BOATING           | 21 FOLLOWING IN-DEPTH REPORTS MEDIA |
| 2 REPAIRING OR MENDING THINGS | 22 VISITING GALLERIES, CONCERTS     |
| 8 BUSHWALKING, CAMPING        | 23 HOTELS AND SOCIALIZING           |
| 12 FOLLOW POLITICS IN MEDIA   | 26 WATCHING TELEVISION              |
| 14 PLAYING TEAM SPORTS        | 27 READING/LISTENING TO MUSIC       |
| 15 PLAYING GAMES OF SKILL     | 28 FISHING                          |
| 20 MAKING THINGS USING PLANS  | 30 NOTHING IN PARTICULAR            |

The analysis of the reasons for engaging in leisure activities, using the combination frequency approach, produced six separate groups: Miscellaneous, Creativity, Relax, Social interaction, Challenge, and Learning. However these groups were less clear than those found from the analysis of the leisure activities. Three of the six 'groups' contain only one reason.

Three of the categories have parallels in past studies. The reasons in the Creativity group are found in Pierce's (1980) Achievement factor of satisfactions, and in London et al's (1977) Feedback group. Social interaction has similar reasons to Pierce's Intimacy and london et al's Positive Interpersonal interaction. Finally, Pierce's Relaxation factor matches To Relax.



## APPENDIX F.

Principal Components Analysis: Of Responses Indicating the Importance  
of Reasons for Respondents Leisure Activities in General.

(NFACTORS=4; from Eigen values >1.0).

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
	(Social)	(Action)	(Autonomy)	(Relaxation)
1 ORGANIZE OWN ACTS.	0.26197	0.10015	0.53855*	-0.03822
2 FEEL POSITIVE DEVEL.	0.42906	0.25001	0.46575*	0.00411
3 RELAX	0.13816	0.03938	0.09189	0.51266*
4 PRIVACY	0.10685	0.13165	0.68401*	0.44821*
5 RELIEVE FRUSTRATION	0.31459	0.36351	0.32664	0.38805
6 ENJOY FAMILY LIFE	0.49726*	0.19529	0.35727	0.10245
7 CHANGE FROM ROUTINE	0.38287	0.10098	0.12500	0.29817
8 FILL IN THE TIME	0.37397	0.35544	0.29954	0.20299
9 GET TO KNOW OTHERS	0.69448*	0.29288	0.05650	0.15865
10 COOPERATE WITH OTHERS	0.73966*	0.33280	0.12681	0.11030
11 CHALLENGE-EXCITEMENT	0.14808	0.68122*	-0.12909	0.18610
12 COMPETITION	0.41250	0.58731*	-0.02589	0.27610
13 THINKING-PUZZLING	0.33477	0.48235*	0.41292	0.01618
14 DEVEL. DIFF. SKILLS	0.34932	0.57829*	0.31934	-0.00805
15 INCREASE KNOW. , SKILLS	0.41315	0.55684*	0.43245	0.04213
16 HEALTH, EXERCISE	0.45954*	0.19897	0.23449	0.20985
17 RESPECT OF OTHERS	0.56237*	0.43111	0.23411	0.17439
18 SEE MY RESULTS	0.33122	0.51199*	0.19401	-0.10795
19 ORGANIZE TEAMS	0.61960*	0.49013*	0.16036	0.25612
20 INFLUENCE OTHERS	0.57725*	0.38062	0.26062	0.15052



21 OTHER REASONS	0.00316	-0.00977	0.15892	0.04331
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Note. \* = Loadings greater than 0.4500.

High loadings on 'Cooperating with others', 'Getting to know others', 'Influence others', and 'Gaining the respect of others' strongly suggest a Social factor for Factor 1. The second factor had more of a range of reasons loading upon it. 'Challenge/excitement' and 'Competition' suggest one facet while 'Thinking/puzzling', 'Developing different skills', and 'Increasing knowledge and skills' suggest another. All seem to be active reasons, thus this is labelled Action. The three reasons loading on Factor 3 are 'Privacy', 'Organizing own activities' and 'Feeling personal development' all suggest the Autonomy label. The fourth factor has only two reasons loading greater than 0.4500 upon it and these are still below 0.5200. However, 'Relax' and 'Privacy' appear to constitute a clear Relaxation factor.

Appendix G.

Reasons for engaging in Leisure Activities in General  
(grouped by predominant profile) correlated with  
Reasons for engaging in Leisure Activities in General  
(grouped by factor analysis).

	RWFAC1	RWFAC2	RWFAC3	RWFAC4
	(Social)	(Challenge)	(Privacy)	(Relax)
RWCOMB1	0. 6166	0. 4255	0. 7754	0. 5427
(Misc.)	(P=0. 000)	(P=0. 000)	(P=0. 000)	(P=0. 000)
RWCOMB2	0. 7260	0. 8035	0. 7085	0. 5365
(Creativity)	(P=0. 000)	(P=0. 000)	(P=0. 000)	(P=0. 000)
RWCOMB3	0. 7108	0. 5945	0. 8385	0. 8346
(Relaxing)	(P=0. 000)	(P=0. 000)	(P=0. 000)	(P=0. 000)
RWCOMB4	0. 7296	0. 5533	0. 4670	0. 3761
(Social)	(P=0. 000)	(P=0. 000)	(P=0. 000)	(P=0. 000)
RWCOMB5	0. 3450	0. 6347	---	---
(Challenge)	(P=0. 000)	(P=0. 000)		
RWCOMB6	0. 6952	0. 7189	0. 7087	0. 5616
(Learning)	(P=0. 000)	(P=0. 000)	(P=0. 000)	(P=0. 000)

Note. '---' = no significant correlation found.

The correlation between the groups of reasons formed by the combination analysis and the factors of reasons formed by a factor analysis were generally all high and positive.

The groupings which were similarly labelled, i.e. 'Relaxing', 'Social' 'Challenge' report correlations of 0.8346, 0.7296 and 0.6347 respectively. However, given the high correlations across most of the factors, it is difficult to interpret any clear patterns.

Appendix H.

Frequency Table: Leisure Activities. Percent of  
the Sample Interested In And Have Previously  
Engaged In Each Leisure Activity.

<u>Leisure Activities.</u>	<u>Frequency.</u>	<u>%</u>
1- SWIMMING, BOATING	54.4	
2- REPAIRING OR MENDING THINGS	42.4	
3- DEVELOPING/PROCESS PHOTOS	8.0	
4- PLAYING A MUSICAL INSTRUMENT OR SINGING	29.6	
5- TAKING PART GUIDES, SCOUTS, YOUTH GROUPS ETC.	14.4	
6- KEEPING TIMES/RECORDING RESULTS AT SPORTING EVENTS	6.4	
7- EARNING SOME MONEY SELLING THINGS	9.2	
8- BUSHWALKING, HIKING, CAMPING	48.0	
9- VISITING SCIENTIFIC/TECH NICAL DISPLAYS OR LECTURES	18.8	
10- TAKING PART IN PLAYS OR MUSICALS	9.6	
11- PLANNING AND GIVING PARTIES	20.0	
12- FOLLOWING POLITICS IN THE NEWSPAPER OR ON TV AND RADIO	38.0	
13- COLLECTING/CATALOGUING COINS, STAMPS, PHOTO ALBUMS OR SCRAP BOOKS	21.6	
14- PLAYING FOOTBALL, NETBALL HOCKEY, CRICKET AND OTHER TEAM SPORTS	33.6	
15- PLAYING CHESS, DRAUGHTS BRIDGE, SCRABBLE OR OTHER GAMES OF SKILL	33.6	
16- DOING HANDCRAFTS SUCH AS POTTERY, WEAVING, MACRAME, JEWELLERY MAKING ETC.	25.2	
17- ATTENDING SPORTS EVENTS, POP CONCERTS, FILMS ETC WITH GROUPS OF FRIENDS	35.2	
18- DOING SMALL JOBS SUCH AS GARDENING OR HOUSEWORK FOR A FEE	10.4	
19- KEEPING DETAILED ACCOUNTS OR A CAREFUL DIARY	12.0	
20- MAKING THINGS LIKE MODEL		

	AIRCRAFT, DRESSES, ETC USING PATTERNS OR PLANS	34.8
21-	WATCHING/LISTENING TO IN-DEPTH REPORTS OR DOCU- MENTARIES ON TV OR RADIO	54.8
22-	VISITING ART GALLERIES, EXHIBITIONS, PLAYS OR CONCERTS	37.2
23-	GOING TO HOTELS OR CLUBS AND SOCIALIZING	39.6
24-	PLAYING BACKGAMMON, POKER, MONOPOLY, OR OTHER GAMES OF CHANCE	24.0
25-	USING TYPEWRITERS CALCULATORS OR SIMILAR EQUIPMENT	17.6
26-	WATCHING TELEVISION	62.4
27-	READING/LISTENING TO MUSIC	70.0
28-	FISHING	33.2
29-	SKIING, HORSE-RIDING SQUASH, AND OTHER SOLO SPORTS	36.6
30-	DOING NOTHING IN PARTIC ULAR, 'MUCKING ABOUT'	26.4
31-	GAMBLING, HORSE-RACING	11.6
32-	DRIVING FOR PLEASURE	34.4

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Appendix I.Frequency List of Reasons


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Reasons For Engaging In Leisure Activities.	Frequency.	%
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1 -ORGANIZING MY OWN ACTIVITIES AND BEING RESPONSIBLE FOR MAKING MY OWN DECISIONS	70.1	
2 -FEELING POSITIVE PERSONAL DEVELOPMENT AND GROWTH	58.8	
3 -RELAXING AND TAKING IT EASY	66.6	
4 -TO GIVE ME PRIVACY/ A CHANCE TO BE ALONE	37.8	
5 -TO RELIEVE FRUSTRATION	40.9	
6 -TO HELP ME ENJOY FAMILY LIFE	57.6	
7 -A CHANGE FROM DAILY ROUTINE	67.0	
8 -TO FILL IN THE TIME	14.1	
9 -GETTING TO KNOW NEW PEOPLE/ MAKING CLOSE FRIENDSHIPS	39.0	
10-COOPERATING WITH OTHERS	43.2	
11-CHALLENGE AND/OR EXCITEMENT	57.7	
12-TO BE INVOLVED IN COMPETITION	27.2	
13-THINKING/PUZZLING THINGS OUT	53.4	
14-USING AND/OR DEVELOPING A NUMBER OF DIFFERENT SKILLS	65.7	
15-TO LET ME KNOW WHATS GOING ON/ HELP ME INCREASE MY KNOWLEDGE AND SKILLS	65.0	
16-FOR HEALTH REASONS/TO KEEP FIT	64.3	
17-GAINING THE RESPECT OF OTHERS OR ADMIRATION OF OTHERS	12.6	
18-SEEING THE RESULTS OF MY EFFORTS/ HAVING A FEELING OF ACHIEVEMENT	78.3	
19-ORGANIZING TEAMS, GROUPS OR ORGANIZATIONS	11.4	
20-BEING IN A POSITION WHERE I CAN INFLUENCE THE LIVES AND WELL-BEING OF OTHERS	19.8	
21-OTHER REASONS	66.7	

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DO WHAT YOU MOST WANT TO DO...

THE LEAST THAT CAN HAPPEN IS THAT YOU WILL BE HAPPY.